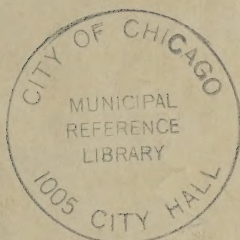


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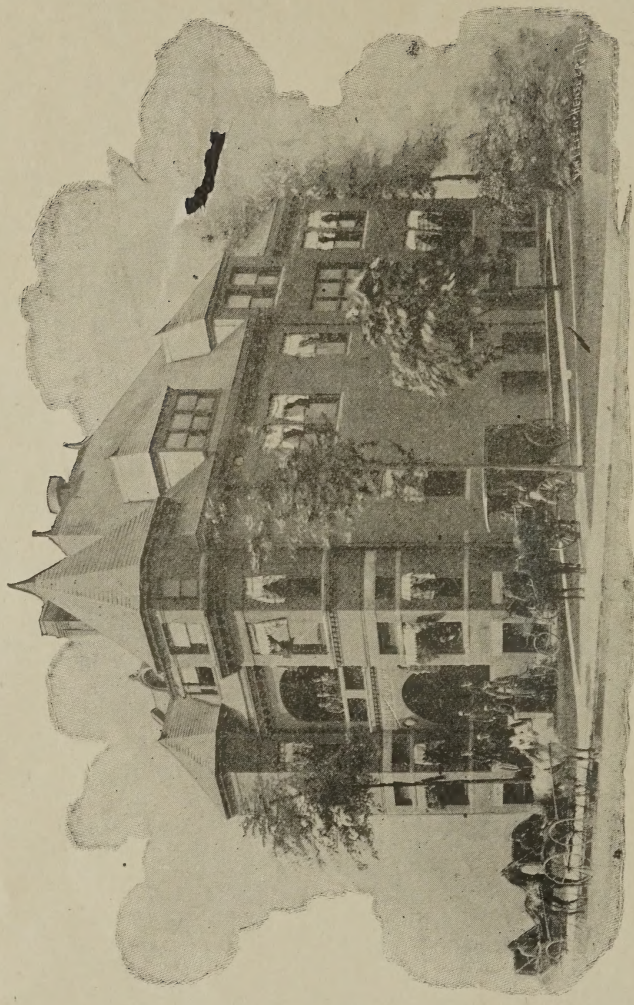
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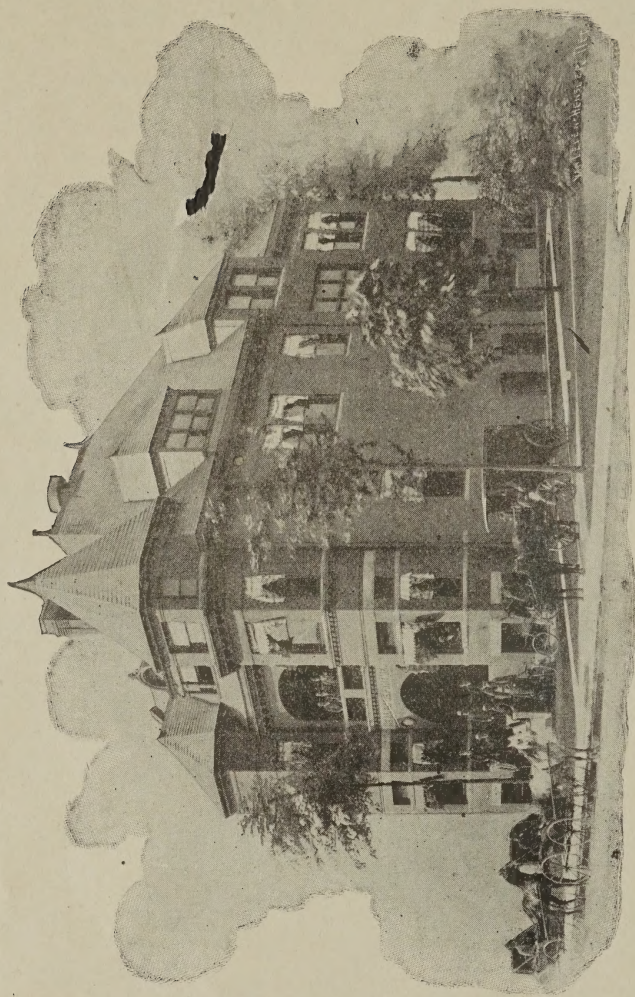
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TWENTY-EIGHT ANNUAL  
REPORT

OF THE

BOARD OF HEALTH

OF THE

CITY OF DETROIT

FOR THE FISCAL YEAR  
ENDING JUNE 30th, 1909

DETROIT, MICH.

CHAS. M. ROUSSEAU & SONS, PRINTERS, 44 WEST LARNED STREET.  
1909.



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ELIZABETH SUTTON,	.. .. .	Matron
SOPHIA CAMPBELL,	.. .. .	Matron's Assistant
MARY CEAZER,	.. .. .	Matron's Assistant



## REPORT OF THE HEALTH OFFICER

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DETROIT, MICHIGAN, July 1, 1909

*To the Honorable the Board of Health :*

GENTLEMEN—The following is the report of the Health Officer for the fiscal year ending June 30th, 1909.

### PERSONAL INVESTIGATION OF CASES

During the year I have investigated, for the purpose of diagnosis, 288 cases that were reported to this department as suspicious of smallpox or some other contagious disease. Persons examined were found to be suffering from various diseases as follows: Smallpox, 11; vaccinia, 2; chickenpox, 20; tonsillitis, 11; diphtheria, 41; scarlet fever, 68; measles, 35; German measles, 28; syphilis, 7; gonorrhea, 4; tuberculosis, 5; pneumonia, 2; typhoid fever, 2; drug erythema, 11; and other diseases, 41. Under the head of "other diseases" are included such ailments as eridaria, scabies, impetigo, acne, eczema, and several others.

### VACCINATION

Free vaccination has been offered at the Board of Health building during the year as heretofore. One of the staff physicians is on duty from 10 to 11 o'clock daily, except Sundays, for this purpose. During these hours, a large number of persons, mostly children, are vaccinated. Besides this routine practice, we have, in all cases of smallpox, vaccinated all persons whom we could locate that had been in any way exposed to the disease.

## SMALLPOX

During the entire year we have had but 11 cases of smallpox all of which recovered. Only one of the patients claimed to have been vaccinated but showed no scar of successful vaccination so that it seems safe to say that none of the cases had ever been successfully vaccinated. The last case recovered and was discharged from the hospital on the 15th of June.

## SCARLET FEVER

The number of cases of this disease reported during the year shows a reduction over the previous year, the total number of cases being respectively 517, and 567. The mortality from this disease was also considerably lower, there being but 35 deaths out of the 517 cases or a mortality rate of a little less than 7 per cent. as compared with 84 deaths in a total of 567 cases or a mortality rate of 15 per cent., for the previous year. This showing of a reduction not only in the number of cases but also in the mortality percentage of the cases, is a very gratifying one. It seems to show that the mild cases as well as the severe ones were recorded in this office and this is undoubtedly due to the fact that doctors are reporting all cases that are suspicious of scarlet fever as well as those that are pronounced cases and to the further fact that through the vigilance of our corps of medical inspectors in the schools mild cases are found and reported which would otherwise have gone unrecorded.

The difference in the mortality of the cases treated outside the hospital and those that were cared for in Harper Hospital is quite considerable. During the year 98 cases of scarlet fever were taken care of at Harper Hospital and only two died, showing a mortality rate of less than 2 per cent. This is, as I have said in my previous report, one of the strongest arguments in favor of hospital facilities for all of the cases. It is my pleasure to call attention to the fact that the plans are now completed for the municipal contagious disease hospital and it is my hope that during the year the hospital will be completed and thereby facilities for a larger number of

cases will be at hand and as a result the mortality from scarlet fever in the City of Detroit will be still further reduced.

#### DIPHTHERIA

Judging by the number of cases of diphtheria reported during the year, this disease was more prevalent in Detroit than at any time during the past five years, but when we come to analyze the reasons for this increased number of cases it will become apparent that the difference is probably in the number of cases reported and recorded rather than in the number of cases that actually existed in the city. During the year ending June 30th, 1908, there were 838 cultures sent in to the bacteriologist for the determination of the presence of the diphtheria bacilli, whereas during the present year there were 1514 such cultures submitted. This shows that here too the physicians are becoming more vigilant and are reporting to us not only undisputed cases of diphtheria but all suspicious cases as well. Again when we take into consideration that the medical inspectors of schools discovered in the school rooms during the year 18 cases of unquestionable diphtheria and 818 cases of tonsillitis many of which proved upon culture examination to be mild cases of diphtheria, the increase in the total number of cases reported seems to be pretty well accounted for.

In the mortality of the disease compared with the number of cases we find a slight decrease this year over the year previous. During the year ending June 30, 1908, the mortality rate from this disease was a little less than  $9\frac{1}{2}$  per cent., whereas this year we find a mortality per cent. 8.6. What has been said of the hospital treatment of scarlet fever applies equally well to diphtheria. Of 199 cases of diphtheria that were treated at Harper Hospital during the year, 8 died, showing a mortality rate of approximately 4 per cent. whereas of the 744 cases treated at their respective homes, 73 died, or a mortality rate among these cases of nearly 10 per cent. This would tend to show that if it had been possible to care for all of the 943 cases reported during the year, at the hospital, we might have saved 6 per cent. of the cases that had to



be treated at home or a total of 44 lives. Again I repeat that this saving of lives by hospital treatment is one of the strongest arguments in favor of a municipal hospital for contagious diseases and I am glad that the time is not far distant when the City of Detroit will be blessed with such an institution. Let us not forget that the advantage of properly isolating the cases in a municipal hospital and the consequent restriction of the disease and reduction in the number of cases is another strong argument which shows the need of the early establishment of such an institution.

#### TUBERCULOSIS

The facilities for the open air treatment of tuberculosis are being gradually increased by the addition of tent-houses and cottages on our grounds on Hamilton Boulevard. At the beginning of this year we had but two tent-houses, one of which was presented to the Board of Health by the Tau Beta Alumnae Association. This society is made up of young ladies who are much interested in the prevention of tuberculosis, and who, besides presenting the Board of Health with a tent-house, are paying into our fund annually an amount of money sufficient to pay for the care of one patient. Each of these small houses had accommodation for two patients giving us at that time a capacity of four beds. During the year six additional tent-houses were erected and the old building which had stood on the grounds, unoccupied, was remodeled and put into shape for an administration building and the upstairs was arranged as an open ward for the reception of nine patients. This gave us a total capacity of twenty-five beds. One of the new tent-houses erected during the year was presented to the city and the Board of Health by Mr. Adolph Finsterwald in memory of his wife, Eva Finsterwald. Besides donating the tent fully equipped, Mr. Finsterwald has endowed it to the extent that he will pay the expense of caring for one patient each year and the only request that the generous donor has made is that the little tent house be named the "Eva Finsterwald Tent".

During the Christmas Holiday Season the Michigan Branch of the National Red Cross Society conducted a sale of "Christmas Red Cross Stamps", the proceeds of which sale were to be used in the Anti-Tuberculosis crusade which is being conducted by that Society. The sale of the stamps brought into the treasury of the Society about \$3,400.00 and the officers subsequently decided to give \$500.00 to the Michigan State Society For The Prevention of Tuberculosis and the balance to the Board of Health for the purpose of erecting a cottage for the care of patients and of paying the expenses of a nurse to look after the patients in that cottage. Accordingly a very complete open air cottage has been erected on the Hamilton Boulevard grounds for the accommodation of eight patients and a nurse. This building is equipped with bath and toilet facilities, lockers, etc.

In February the Detroit Society For the Study And Prevention of Tuberculosis donated to the Board of Health an amount not to exceed \$2000.00 for the erection of a building to accommodate eight patients and a nurse and they also donated an amount not to exceed \$400.00 for the purpose of furnishing this building. This cottage, known as the "Blue Star Cottage", has been erected on the grounds on Hamilton Boulevard and stands next to the building donated by the Red Cross Society and which is known as the "Red Cross Cottage". These two buildings were constructed at the same time and are exactly alike. They make a very pretty appearance among the group of buildings now used for tuberculosis patients and are up-to-date and complete in every respect.

All of these improvements and additions have raised our capacity from two beds at the beginning of the year to forty-one beds at the present time. It is needless to say that besides having the beds occupied we have, most of the time at least, a waiting list of considerable length. It is the intention of the Board of Health to still further enlarge the facilities during the coming summer so that we will have accommodations for at least fifty patients and ample administration room to take care of that number.

The work at the tuberculosis clinic in the Board of Health building is constantly increasing and the report of the attending physician shows that during the year 459 persons presented themselves at the clinic for examination and the total number of visits made to the clinic by all patients was 2008. Needy patients have been supplied with milk and eggs during the year, 3450 dozens of eggs and 12,498 quarts of milk having been dispensed. We have been supplied with a nurse for our clinic work by the Detroit Society For The Study and Prevention of Tuberculosis and without such aid the work of the clinic could not have been so successfully carried on.

A detailed account of the work done at the clinic and the results accruing from the treatment at the Sanatorium may be found in the report of Dr. V. C. Vaughan, Jr., Medical Inspector of the Board of Health, who has been in direct charge of all the patients, both those who visit the clinic and those treated at the Sanatorium.

The Board of Health and the city of Detroit are certainly under great obligations to Mr. Adolph Finsterwald, The Tau Beta Alumnae Association, The Red Cross Society, and the Detroit Society for the Study and Prevention of Tuberculosis for their generous gifts which have been described above. Besides these donations the Board of Health has received during the year gifts for the patients at the Sanatorium from various persons as follows: Mrs. Tracy McGregor, heavy fur-lined coat and other clothing; Miss Clara Dyar, flowers, fruits and candy; "Luxor Young Women's Missionary Society of the First United Presbyterian Church", canned fruit, jelly and clothing; Mrs. Samuel T. Douglas, Mrs. Charles Ducharme, Mr. Herman G. Kiefer, books and magazines. On Christmas Day a very pretty celebration was arranged for the patients. A small club of ladies consisting of the following: Mrs. Carl Bonning, Mrs. Guy L. Kiefer, Mrs. A. E. Kiefer, Mrs. R. S. Melchers, Mrs. A. H. Steinbrecher, Mrs. William E. Henze, and Mrs. Morse Rohnert, made arrangements for the festive day. They provided an individual present for each patient, the women being furnished with woolen bonnets, the handiwork of the members of the club above



referred to, and the men receiving heavy woolen mittens. A Christmas tree was nicely trimmed for the occasion and the administration building decorated with evergreens and holly. All of the decorations were donated by Mr. Samuel T. Douglas, President of the Board of Health, and many beautiful flowers were added to the decorations, the gift of the Tau Beta Alumnae Association. Grinnell Brothers loaned the use of a music box which added greatly to the pleasure of the day.

For all of these gifts and kindnesses the Board of Health is under great obligations to the donors and I desire at this time to express in this public report the thanks of the Board of Health.

The progress made in the crusade for the restriction of tuberculosis during the past year has been considerable. The number of deaths reported from tuberculosis of the lungs during the year was 399 and this is the lowest since the year ending June 30, 1905, when the number reported was 396. During the years since that time the number of deaths from this cause were 431, 458, and 443 for the years 1906, 1907 and 1908 respectively. Whatever has been accomplished in our fight against tuberculosis has been done up to the present time without the aid of any specific legislation, but next year our results should be very much better because we will have a good and complete law requiring the reporting of all cases of tuberculosis to the Board of Health. This law was passed by the State Legislature during this winter's session and will go into effect about Sept. 1st. It is similar to the New York law, the latter having been somewhat amended and, in my opinion, improved. The State Society for The Study and Prevention of Tuberculosis, the various local societies, the State Board of Health and the various local Boards of Health, all worked together for the passage of this law and they were aided by the physicians of the state through the State Medical Society and the various county medical societies. With all of this sentiment in favor of the passage of the bill there should be no reason why the law will not enforce itself and when it does, the work against the spread of tuber-

culosis will become a less difficult task and the results obtained will be more marked.

#### PNEUMONIA

The number of deaths from pneumonia is about the same as that reported last year. During the year ending June 30, 1908, there were 431 deaths reported, this year there are 451. This increase is not considerable when we consider the growth of the city. The precautionary measures that we have been able to take for the restriction of this disease have been limited almost entirely to the disinfection of houses from which deaths from pneumonia are reported. We are anxious to do more but public sentiment must first be aroused through a campaign of education. As soon as public opinion demands the notification of cases of pneumonia to the Board of Health, the results of our campaign against the spread of this disease will be better,

#### TYPHOID FEVER

In looking over the mortality tables we find an increased number of deaths reported from typhoid fever as compared with the previous year. Last year there were 76 deaths from typhoid, this year there are 98. This increase may be accounted for to some extent by a local outbreak of the disease on the east side of the city due to an infected milk supply and concerning which I will report later. What I have said about the notification of pneumonia applies equally well and perhaps with greater force, to typhoid fever. If we could succeed in having typhoid put on the notifiable list, giving us an opportunity to locate all of the cases, we could of course do much more towards the prevention of the spread of the disease. As it is our precautionary measures must be general and we must keep in mind the three principle ways in which this disease is spread, namely, by personal contact, by flies, and by infected milk and water. To avoid the spread of typhoid by personal contact we distribute circulars of instruction to all householders in whose houses the disease is known to exist and we disinfect all

houses in which a case is reported to have recovered or died. To guard against the dissemination of the disease by flies we are instructing the people in whose houses typhoid is reported, to properly screen the patient's room and, if possible, the entire house, and we are doing all in our power to rid the city of fly-breeding manure piles and infected privy vaults. In regard to the milk supply, we are keeping track of the supply of all known cases and when we find that any given supply is the possible source of the disease we stop the distribution of such milk until all possible danger of the spread of typhoid has been removed. Right here I desire to report the outbreak that occurred during September of this year in the eastern part of the city and which was due to infected milk. Inasmuch as typhoid cases are reported to this department by but few physicians my attention was not attracted to the outbreak until it was well under way. The report of a case by Commissioner Haass, of the Board of Health, and the information from him that he was told there were a number of cases in that vicinity, led me to investigate. By going into the neighborhood and inquiring at some of the houses, I was directed from case to case until I had located 21 cases of typhoid fever, all on the route of one milk vendor. An investigation at the milk depot and the home of the dealer threw no light on the subject, that is, there seemed to be no reason why he should spread the disease. Dairy Inspector Roehl and myself then went out to the farms from which the local dealer procured his milk and found filthy and unsanitary conditions and circumstances pointing to these places as the possible sources of the outbreak. The farms are located along the banks of and near Connor's Creek, north of Mack avenue. A further investigation by Inspector Roehl revealed the fact that some of the milk dealers in that vicinity and along the banks of Connor's Creek had had cases of typhoid fever in their families. Our first step was to shut out the sale of all milk from that section in Detroit pending a cleaning up which we ordered as follows: All barns and stables as well as farm houses and contents to be thoroughly disinfected, all cows carefully cleaned, all utensils boiled and disinfected and the use of



water from the creek for any purpose, discontinued. Then we looked after the disinfection of the premises and utensils of all local dealers who had been getting milk from the above named farmers. As a result of this action cases of typhoid and deaths from that disease in the eastern section of Detroit soon disappeared. I have reported this circumstance in full because I believe that it demonstrates the need of a law requiring the reporting of all cases of typhoid. If we could follow each case in the city from a complete system of records, many cases could undoubtedly be prevented which are now occurring each year in Detroit and the mortality of typhoid could be considerably reduced. Typhoid fever in Detroit is, in my opinion, spread by personal contact, by flies and, in occasional outbreaks, undoubtedly by milk. The water supply seems to be beyond suspicion but we can never be sure that it will long remain as wholesome as it is today. I desire to repeat in this connection what I have said in my last year's report, namely, that there is a danger, and this danger is constantly growing, of the contamination of our water supply from the towns and villages above our intake and it seems to me that the time is at hand when Detroit must further purify and protect its water supply by a municipal filtering plant. Again I desire to call the attention of the Honorable the Board of Water Commissioners to this matter and urge them to give it their earnest consideration.

#### HOSPITAL FOR CONTAGIOUS DISEASES

The need of more hospital facilities in Detroit for the care of contagious diseases has been so conclusively proven and I have again called attention to some of the arguments in favor of the establishment of such an institution, under the titles, Diphtheria and Scarlet Fever, in this report, that it seems to me the subject needs no further comment. The improvements and additions for the care of cases of tuberculosis have also been previously dealt with in this report. Besides these improvements, the Board of Health have had plans drawn for the erection of two hospital pavilions, one for diphtheria the other for scarlet fever, each to

accommodate thirty patients, to be placed on the grounds on Hamilton Boulevard. Besides this, plans have been drawn for an administration building to be erected on the same grounds, large enough to supply the two pavilions now planned and such additional pavilions as may be needed in the future. These plans, drawn by architect George D. Mason, have been accepted by the Board of Health, and the architect has been ordered to advertise for bids and to hasten the work of constructing the hospitals. It was the intention of the Board to erect several additional pavilions this year but the appropriation of \$150,000.00, asked for for that purpose was cut by the Common Council and the Board of Estimates to \$50,000.00. Adding to this amount the balance left from the original \$100000.00 after the fifteen acres of ground on Hamilton Boulevard and the improvements to the Tuberculosis Sanatorium were paid for, we have at our disposal approximately \$100,000.00 for the erection of new buildings. With this limited amount it will be impossible to complete more than two, or possibly three, buildings. We hope, however, that by next spring, when the Board of Estimates is again in session, our hospital buildings will be far enough advanced so that the members will see the need of additional facilities and grant more money to complete the plans that are in contemplation by the Board of Health.

#### MEDICAL INSPECTION OF SCHOOLS

In the work of medical inspection of schools the number of schools inspected and the number of physicians employed have remained the same. There are 27 physicians who examine the children in 109 schools, giving each physician four schools, with the exception of one who has five. This year two school nurses have been added to our staff and they have accomplished much good work which will be reported upon under a separate heading. The number of pupils examined by all of the physicians was 50,501 and the number excluded, 3,499. The principal causes of exclusion were tonsillitis, pediculosis and impetigo, and the number of cases of each in the order named was, 818, 505, 477. There were also

excluded 226 cases of chicken-pox, 171 of scabies, 170 of measles and 106 of German measles.

This year the Medical Inspectors have paid more attention than ever before to the examination of children for physical defects. Children in whom such defects were found were not excluded from school but cards were sent to their parents or guardians recommending that they put the child under treatment for the removal or correction of the physical defect. In the schools in which nurses were employed the results obtained were better than in the remaining schools but even in those schools, in which there were no nurses, the results were gratifying. The total number of pupils in whom physical defects were found and the correction of the same recommended, was 2118. Of this number about 800, or nearly 40 per cent. received some attention after the cards of recommendation had been sent to their homes. Among the defects found the principal ones were, defective eyesight, adenoids, enlarged tonsils, defective teeth and defective hearing. Up to the present time the examination of children for physical defects has been limited to such pupils as have been referred to the physicians by the teachers and principals in all of the schools. In December I made an experiment by having one of the doctors and a nurse make a complete physical examination of 300 children, taking all of the children in several classes of one school, with the following result: Of the 300 examined, 208, or nearly 70 per cent. were found to have one or more physical defects. The nurse followed the children to their homes and succeeded in having a large percentage given medical attention and all of those who were not attended to immediately, are to have their physical defects corrected during the coming summer vacation, according to the promises made to the nurse by the parents of the children. I have not included among the 208 children who had some physical defect, those in whom defective teeth were found and if they were counted the total number of children out of 300, having some physical defect would be 270. This large percentage of children having defective teeth led to the establishment of a free dental



clinic. In this work the District Dental Society, composed of nearly all of the reputable, registered dentists of Detroit, gave us valuable assistance. They furnished a dentist who examined the teeth of the 300 children referred to, free of charge. They then established a free dental clinic at Grace Hospital to which all the children, whose parents are unable to pay for dental treatment, can be taken. At this clinic members of the District Dental Society give their services and the material necessary for the correction of the defective teeth, free. Many of the children have been taken to the clinic and the improvement in the oral hygiene among the pupils of the Parke school has been very marked.

As a result of the large percentage of physical defects found among the 300 pupils above referred to, I have decided to attempt next year a complete physical examination of each child entering school. The records thus obtained will be kept by a card system and in the course of time a complete record of the physical condition of each child will have been filed.

Next to defective teeth, the physical defect most common among school children was found to be defective eyesight and for the correction of most of these cases eye-glasses are necessary. In the case of poor families it is difficult to have a careful examination of the eyes made at the various dispensaries because such examination requires much time on the part of the examining oculist. With this difficulty in mind I appealed to the Detroit Ophthalmological and Otological, and after presenting the facts to the Club, made the request that its members furnish us some aid in handling this problem. The club passed a resolution to the effect that if the Detroit Board of Health will give the space in its building for a clinic room for examination and treatment of the eyes of the poor children, after the case has been investigated and found to be poor, they, the members of the Club, will divide up the time and give their services free of charge for this very worthy charity. The Board of Health have accepted this generous offer and expect to be ready for this work at the opening of the next school year. It only remains now for the Board to devise ways and means of fur-

nishing glasses after they have been prescribed and much good will be accomplished for the unfortunate children in removing this severe handicap, defective eyesight.

#### SCHOOL NURSING

The work of school nursing was begun in Detroit several years ago, the work being done by a nurse furnished to the Board by the Visiting Nurse Association. The duties of the nurse are manifold. She visits the homes of the children who have been excluded from school for contagious diseases to see that they have proper attention. When medical attention is required, she prevails upon parents to call in their family physician or, in case they are too poor to pay for the services of a physician, she sees that the city physician is summoned. In minor contagious conditions, such as pediculosis and the like, she shows the mother how to clean the child's head and, in many cases, she actually does the cleaning herself. When the child has been examined as to its physical condition and a card sent home recommending the correction of some physical defect, the nurse sees that, if possible, proper attention is given the child. Besides all of this the nurse conducts what might be called a clinic, in each school at which she attends. Each nurse is given four schools to attend regularly and she is required to make such other calls as her time will permit. At the school clinic the nurse attends to such minor defects and ailments as may be corrected without sending the child to its home.

The schools regularly attended by the nurses were the Bishop, Capron, Washington, and Clinton on the east side by Miss Martha Aylesworth and the Hubbard, Webster, Preston and St. Anne's on the west side, by Miss Cassie McIntyre. Miss Aylesworth made a number of visits during the year to the Everett, Barstow, Roberts Lincoln and Russell schools, besides occasional visits to several others and Miss McIntyre assisted in the work of the complete examination of 300 children in the Parke school, the work being conducted by Dr. T. B. Cooley. During the year the two school nurses made 1169 visits to the schools and 3723 visits to the homes

of pupils. They gave personal attention and such treatment as was possible at the school clinic in 4651 different instances and personally took 158 children to clinics for treatment. Besides this the nurses personally cleaned 46 heads in homes where the mothers were either too careless or too ignorant to administer this necessary treatment. Of the visits made to the homes of the pupils, 2262 were made because pupils had been excluded for contagious diseases and 461 because the correction of physical defects had been recommended. Of the 461 cases of physical defects 289, or a little over 60 per cent., were corrected. Of these cases 152 suffered from defective eyesight and 76 received attention, the large majority of them being provided with glasses, 79 had diseases of the eye not due to defective vision but mostly conjunctivitis and all of these received treatment and were relieved. There were 28 cases of diseases of the ear, 16 of which received medical attention; 12 cases of defective hearing all of which were relieved; 82 cases of adenoids, 50 of which were operated upon; 66 cases of enlarged tonsils, 25 of which received treatment; 36 cases of defective teeth, 27 of which were attended to; and 6 cases of phimosis, 4 of which were relieved by operation.

It will be seen by these figures that the work of the visiting nurses in the schools is a most valuable one and should be extended to include more of the schools of the city. In February when the annual budget of the Board of Health was submitted to the Common Council and the Board of Estimates, an appropriation for two additional nurses was requested. The good work done by the school nurse was recognized by the committees of both of the above named Boards, but the Board of Estimates did not think it possible to allow money sufficient for the employment of two additional nurses the coming year but did allow the salary for one more nurse. This will give us a corps of three nurses for the next school year and the results obtained will be in proportion to the additional aid thus secured.



## MILK AND DAIRY INSPECTION

The two new milk and dairy inspectors who were added to our staff by last year's action of the Common Council and Board of Estimates, started upon their duties at the beginning of this year. It was my intention that these two men should devote all of their time to the inspection of dairies outside of the city limits from which milk was being sent into Detroit. During the year they have inspected and made repeated calls to nearly 700 such sources of our local milk supply with the result that many improvements have been made on the farms and the standard of the milk coming to Detroit from the dairies that we have been able to reach, has been raised. It has not been possible for the two men to reach all of the farms that supply milk for Detroit during the first year of their service, but this was not expected. There is no question but that the inspection of farms is a step in advance and without such inspection it would be practically impossible to ever properly control the milk supply of Detroit. The city inspectors are enforcing the rules and regulations as applied to the city dairies and milk depots more rigidly than ever before. Persons who have hitherto conducted a small milk business, keeping several cows in a barn on a city lot, are being refused licenses on the ground that their very location is *prima facie* evidence against the conducting of a sanitary dairy. A number of complaints have been made during the year against persons for selling milk without a license with the result that the violators have subsequently gone out of business.

The report of the milk and dairy inspectors herein printed gives a detailed account and tabulated statement of the work done in this department both inside and outside of the city limits.

## SMOKE INSPECTION

The work of this department is constantly increasing. At the beginning of this year the Smoke Inspector was given an assistant to help him in his duties. The inspectors are still working along the line of a campaign of education, endeavoring to teach owners, engineers and firemen the necessity of enforcing the smoke ordin-

ance. During the year a number of complaints have been made against wilful violators, who refuse to pay any attention to repeated warnings. The exact number of chimneys inspected, smoke devices installed, complaints made in court and smoke nuisances abated may be found in the report of the Smoke Inspector.

#### DISPOSAL OF REFUSE

In my last year's report I called attention to the fact that this question is being inadequately handled by the city of Detroit. I desire to repeat what I then said and to again call attention to the fact that it is time for the city to seriously consider this problem and to definitely solve it. Garbage and ashes are being collected by the Department of Public Works but less attention is being paid to other household refuse and horse-manure, the greatest menace of all waste, is entirely neglected. The final disposal of all refuse other than garbage is of as great importance as is its collection. Such refuse as is now collected is taken from the alleys and carried to some other place a little farther from the center of the city, conveniently called a "dump". These dumps are a constant source of complaint to the Board of Health and justly so, because they are certainly nuisances. It is time that the city be provided with a "refuse destructor", preferably an incinerating plant, which will take care of and finally destroy not only the garbage but all the household refuse, including horse manure and ashes, after it has been collected at regular intervals from each household in the city. The refuse thus collected would first be taken to a sorting yard, all salable material picked out and the balance destroyed in the incinerator. It goes without saying that it might be necessary to have several such incinerating plants to take care of all of the refuse that would be collected in a city the size of Detroit. This is an important question and I again desire to call the attention of the Common Council to the matter and urge that they give it their early and careful consideration. Formal communications, based upon resolutions passed by the Board of Health, bearing upon this sub-

ject have been repeatedly sent to the Common Council but up to the present time they have received little or no attention.

#### HOUSING PROBLEM

During the year much attention has been paid to the solution of this problem. Many unsanitary houses and premises were visited and inspected by the Sanitary Engineer. In fact Mr. Williamson has given this matter all of his spare time and has ordered many changes and alterations and, in some instances, houses have been ordered to be entirely remodeled or even torn down. Some of the worst places of this kind in Detroit have been entirely removed and others have been considerably improved. The group of shacks, formerly located on Orleans street between Macomb and Monroe and known as the "Japanese Village", has been torn down. Allen's Mission, a cheap rooming house formerly located on Cadillac Square, is no longer doing business at that stand. When the business was discontinued there, we ordered a thorough cleaning up and it was done under the personal supervision of Sanitary Engineer Williamson. A number of old, filthy, wooden cots and bedsteads, not less than 400 pillows, about the same number of comforters and 284 mattresses were taken out by order of the Board of Health and subsequently burned. The building was thoroughly cleaned and entirely remodeled and is now being used by a wholesale paint and glass company. "Little Hungary", a row of two-story, delapidated, unsanitary brick buildings, located at the corner of Kirby avenue and Riopelle street, and formerly occupied by no less than 150 Hungarians, has been vacated and ordered remodeled. The order given by the court in this case was to the effect that the buildings are not to be reoccupied until remodeled in accordance with the rules and regulations of the Board of Health. The remodeling process is now under way, an entirely new system of plumbing and drainage is being installed, the interior of the buildings is being thoroughly renovated and it is the intention of the owner to make stores of the majority of the buildings. In the meantime the former occupants



of the shacks have left the city, the majority of them having gone to the beet sugar fields in various parts of the state. The two-story house located at the northeast corner of Antoine and Champlain streets and known as the "House of All Nations" has undergone a complete change. This place has long been an eye-sore to our department and it is a great relief to have had it put out of business. Action was brought against the owners of this place by Sanitary Engineer Williamson and the court ordered the house vacated and the premises remodeled. This order has since been obeyed. A number of other places, similar to the ones described above, have received the attention of this department. "Suicide Row", 6 and 8 Clinton street, has been ordered vacated and will remain vacant until properly remodeled. Temple Hotel, a cheap lodging house at 132 Michigan avenue, is now being repaired and renovated. The agents having charge of our old enemy known as "Tin Can Alley", a cluster of shacks and sheds occupied as dwelling houses, in the rear of Napoleon street between Antoine and Hastings, have promised to tear down most of the buildings and remodel the remainder. At present a case is pending in court against the row of unsanitary houses known as the "Midway" and located in the alley between Brandon and Plumer avenue west of McKinstry. The "Midway" is composed of a row of twenty frame dwellings, none of them suitable for occupancy by human beings. It is to be hoped that the action of the court in this case will be similar to that in former cases and that the "Midway" will soon be a thing of the past.

Realizing the magnitude of the housing problem in Detroit, after the work done by Sanitary Engineer Williamson, the Board of Health asked for an appropriation for the employment of a Special Sanitary Inspector whose duty it shall be to devote his entire time to the correction of this evil. The appropriation was allowed and we hope next year to make even greater progress in our fight against the existence of unsanitary houses in the city of Detroit.

## ABATEMENT OF NUISANCES

A complete tabulated account of the complaints received and the disposition made of the same will be found in the report of the Sanitary Engineer. I desire, however, to call especial attention to one or two items that are pointed in the aforesaid tabulation. It will be seen that during the year 1131 notices have been served for the abatement of the nuisance due to the existence of privy vaults within the city limits. Of this number 869 vaults have been entirely removed and closets approved by the Board of Health installed in their place. In the case of the other 262 the time has not expired that was given them to make the necessary changes but in the course of another month or two all of these privy vaults nuisances will have been abated. In another column we notice that 194 notices were served to owners of barns and stables to remove horse manure. We have been paying especial attention to the privies and the manure piles because we are making a fight to rid Detroit, as much as possible, of the fly nuisance. Sanitarians are recognizing the common house fly as a carrier of disease more each year and we propose to prevent the spread of various diseases by the house fly, to some extent at least, by attention to the removal of manure piles, the breeding place of flies, and privy vaults, their principal feeding places.

## PUBLIC BUILDINGS

In last year's report a complete account was rendered by Sanitary Engineer Williamson of the sanitary condition of all of the public school buildings in Detroit. This report was made to the Board of Education at the request of that Board and I am glad to say that they have adopted, as far as was possible with the moneys at their disposal, the recommendations made by the Board of Health for the improvement of the sanitary conditions of the school buildings. Last year a number of the school buildings contained various types of Smead closets, all of which were condemned by the Sanitary Engineer. They have since been replaced in all of

the buildings by systems of water closets approved by the Board of Health. The Smead heating and ventilating system was also found in a number of the schools and the recommendation made that such systems be removed in all cases. The Board of Education have acted on this recommendation and, as far as the means at their disposal would allow, have installed satisfactory steam blower systems in the schools above referred to. Minor changes of various kinds have also been made in the school buildings in accordance with the recommendations of the Sanitary Engineer. Sanitary drinking fountains have been installed, separate ventilating flues equipped with electric fans for the forcing of foul air from the toilet rooms have been put in, in a number of instances. In some of the buildings and particularly in those which have been equipped with new heating and ventilating systems devices for the prevention of smoke have been installed.

Early this year the Board of Health made some definite recommendations to the Commissioner of Parks and Boulevards with reference to the new bath house on Belle Isle. A study of the conditions on the island make it evident that the location selected for the new bath house is not a desirable one unless the island be supplied, as it should be, with a central sewerage system. As it is at present the sewerage and surface drainage from the entire island flows either directly into the canals or into cess pools which, in turn, empty into the canals. The Commissioner of Parks and Boulevards assured us that he would do all in his power to have such a central sewerage system installed and upon such promise alone we allowed the erection of the new bath house. Commissioner Hinchman did include in his estimate an amount sufficient for the installation of a central sewerage system and pumping system but the amount was not allowed by the Common Council. The Board of Health and the Health Officer did all in their power to have the amount asked for allowed, but in spite of our efforts it was cut out. I am of the opinion that the proper sewerage and draining of Belle Isle Park is an extreme necessity and I trust that



next year the Common Council and Board of Estimates will see their way clear to allow ample funds for this purpose.

#### STATE FAIR EXHIBIT

At the State Fair which was held in Detroit in September the Board of Health was represented by a very instructive exhibit under the personal supervision of Dr. Hayward. Our exhibit met with the commendation of Governor Warner, the State Food and Dairy Department and the public as well. Various methods of examining milk, both chemically and bacteriologically, were demonstrated and there was a carefully prepared exhibit of pathological conditions found in meat.

#### THE EMPLOYEES

All of the employees have done good conscientious work. In spite of the fact that the number of our employees have not been increased in proportion to the growth of the city and in spite of the consequent increase of the work, no complaint has been heard on the part of any of the members of the staff and the clerks and inspectors have continued their extra work with their usual willingness and application to duty.

#### THE BOARD

In closing my annual report I desire again to express to your Honorable Board my appreciation of the consideration and support shown me at all times. I am satisfied that without such hearty and consistent co-operation it would not have been possible to have obtained such satisfactory results in my work.

Respectfully submitted,

GUY L. KIEFER, M. D.,  
*Health Officer.*

## REPORT OF THE SECRETARY

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DETROIT, July 1, 1909.

*To the Honorable the Board of Health.*

GENTLEMEN—The following is respectfully submitted as the report of the Secretary for the fiscal year ending June 30, 1909.

### RECEIPTS AND EXPENDITURES.

	Fund	Expended	Balance	Deficit
Antitoxin .....	\$1,300.00	\$1,793.60		\$ 493.60
Publishing.....	50.00	5.61	\$ 44.39	
Care of poor patients .....	5,000.00	7,671.71		2,671.71
Disinfectants. ....	1,000.00	1,643.39		643.39
Fuel.....	900.00	1,115.57		215.57
Groceries .....	3,000.00	3,001.58		1.58
General expense.....	400 00	550.32		150.32
Hospital repairs.....	400.00	237.95	162.05	
Hospital supplies .....	150.00	23.92	126.08	
Transportation of patients.....	100.00	48.00	52.00	
Laboratory supplies.....	250.00	236.12	13.88	
Messenger service .....	500.00	756.50		256.50
Postage.....	125.00	150.00		25.00
Printing and stationary.....	700.00	783.00		83.00
Transportation of Inspectors ..	1,680.00	2,045.63		365.63
Vaccine ....	200.00	160.33	39.67	
Labor at Smallpox Hospital...	800.00	638.57	161.43	
Medical Inspectors of schools..	6,750.00	6,750.00		
Automobile maintenance.....	600.00	762.46	162.46	
Care tuberculosis patients.....	1,200.00	8,424.15		7,224.15
Fixed salaries .....	29,448.00	29,397.25	50.75	

Per diem of two members of the Board of Examiners of Plumbers.....	480.00	480.00		
Salaries of six plumbing In- spectors .....	6,000.00	6,000.00		
Salary of Clerk of Board of Examiners of Plumbers	300.00	300.00		
Clerk Sanitary department....	300.00	300.00		
Transportation of six plumbing Inspectors .....	720.00	720.00		
Books, stationery, stamps, etc., for Board of Examiners of Plumbers.....	100 00	90.91	9.09	
	<u>\$60,783.00</u>	<u>74,086.57</u>	<u>659.34</u>	<u>12,292.91</u>

The several funds as above stated are the amounts allowed by the Board of Estimates for the fiscal year ending June 30, 1909, and the expenditures are for the same period.

The Antitoxin fund, \$1,300.00, shows an overdraft of \$493.60, which the Common Council provided for by appropriations amounting to \$554.07, so that there was a balance of \$60.47 in this fund at the end of the fiscal year.

The Care of Poor Patients fund, \$5,000.00, was overdrawn by \$2671.71, which the Common Council provided for in part by appropriations amounting to \$2,475.00, leaving a net deficit of \$196.71 in this fund at the close of the fiscal year.

The Disinfectants fund, \$1,000.00, was overdrawn by 643.39, which was provided for by appropriations on the part of the Common Council amounting to \$1,859.88, so that a balance of \$216.49 remained in this fund at the end of the year.

The Fuel fund was overdrawn by \$215.57, which was provided for by an appropriation of \$300.00, leaving a balance in this fund of \$84.43

The Groceries fund \$3,000.00, was exceeded by \$1.58, which was provided for by an appropriation of \$75.00, so that a balance of \$73.42 remained in this fund at the end of the fiscal year.



The General Expense fund, \$400.00, was overdrawn by \$150.32, which was provided for by appropriations amounting to \$135.00 and the proceeds of the sale of an unused safe for \$40.00, so that a balance of \$24.68 remained in this fund at the end of the year.

The Messenger Service fund, \$500.00, was overdrawn by \$256.50, which was provided for by an appropriation of \$275.00, leaving a balance of \$18.50 at the end of the year.

Postage fund, \$125.00, was overdrawn by \$25.00, which was provided for by an appropriation of that amount.

The Printing and Stationery fund was overdrawn by \$83.00, which was provided for by an appropriation of \$100.00, so that a balance of \$17.00 remained in this fund at the end of the fiscal year.

The Transportation of Inspectors fund, \$1,680.00, was exceeded by \$365.63, because the two Milk Inspectors working in the territory outside the city, which supplies milk to Detroit, required more money for transportation and other expenses in that connection, than had been appropriated for that purpose, and this was provided for by a transfer of \$400.00 from the balance remaining from last year in the Public Health fund, to this year's Transportation fund, leaving a balance of \$34.37 in this fund.

The Automobile Maintenance fund, \$600.00, was overdrawn by \$162.46, which was provided for by an appropriation of \$130.00, and a transfer from Labor at Smallpox Hospital fund of \$32.46.

The Care of Tuberculosis Patients' fund, \$1,200.00, was overdrawn by \$7,224.15, which was provided for from time to time during the year by appropriations by the Common Council amounting altogether to \$7,845.00, and by \$434.00 received from the Tau Beta Alumnae Association of this city, in payment for the care, from April 23 to June 30, 1909, by the Board of Health of one patient in the hospital tent erected by that Association on the hospital grounds and donated to the Board of Health, so that a balance of \$1,054.85 appeared in that fund at the end of the year

The balance of \$161.43 shown in Labor at Smallpox Hospital fund should be reduced by \$32.46 transferred to Automobile Maintenance fund on June 29, by authority of the Common Council, leaving a true balance in that fund of \$128.97.

The total of the balances in all the funds as above shown is \$2,211.09, which should be reduced by \$196.71, the overdraft in the Care of Poor Patients fund unprovided for at the close of the year, leaving a net total balance of \$2,014.38, at the end of the fiscal year.

#### CONTAGIOUS DISEASE HOSPITAL

The money received from the sale of the bonds issued for the purpose of erecting and equipping this hospital, amounting to \$100,000.00, was credited on the books of the City Controller to the Public Health fund, and had been expended in part at the end of this fiscal year, as follows:

Fifteen acres additional land for site at \$2500.00 per acre. ....	\$37,500.00	
Abstract of title, etc., .....	44.31	
Six hospital tents for tuberculosis patients, additions and improvements to hos- pital building for same purpose. . . .	2,221.10	
Furniture and equipment of this building and tents .....	2,356.29	
	<u>\$42,121.70</u>	100,000.00
		<u>42,121.70</u>
Balance .....		57,878.30

#### BOARD OF EXAMINERS OF PLUMBERS

By an act of the State Legislature the Board of Health is required to appoint a Board of Examiners of Plumbers, whose duty it is to hold meetings for the purpose of examining persons who may apply for licenses, to engage in the business or trade of master or journeyman plumbers in Detroit and to issue licenses to those entitled to receive them. A fully equipped shop for this purpose is

maintained in the Board of Health building. The Board of Examiners so appointed holds meetings regularly every Wednesday evening at 7 o'clock, at the Board of Health building, for the purposes above mentioned.

The following is a statement of the work done during the year by that Board, and of the fees collected :

MONTH	Master Plumber Renewal	Journey- men Renewal	Registra- tion of Drainlayers	Applica- tions for Examina- tion	Total
July .....	\$4 00	\$1 00	\$18 50	\$8 00	\$31 50
August. ....	2 00	1 50	23 00	8 00	34 50
September .....	2 00	50	14 00	4 00	20 50
October. ....	1 00		18 00	2 00	21 00
November .....	1 00		28 00	8 00	37 00
December. ....	3 00	13 50	11 00	6 00	33 50
January .....	217 00	58 00	36 00	36 00	347 00
February .....	28 00	21 50	58 00	32 00	139 50
March. ....	13 00	5 00	52 00	50 00	120 00
April. ....	4 00	4 50	41 00	24 00	73 50
May .....	6 00	2 00	26 00	6 00	40 00
June. ....	3 00	5 00	15 00	16 00	39 00
Total. ....	\$284 00	\$112 00	\$340 50	\$200 00	\$937 00

Which amount was paid into the city treasury and credited to the Public Health fund, as required by law.

Respectfully submitted,

JONH F. MCKINLAY,

*Secretary.*



## REPORT OF THE REGISTRAR OF VITAL STATISTICS

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR—I respectfully submit the following as the report for the contagious disease and vital statistics department for the year ending June 30th, 1909.

### SUMMARY OF MORTALITY.

AGE	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Under 1 year . . . . .	149	161	90	89	64	93	124	95	67	105	69	78	1184
1 to 4 years . . . . .	34	23	11	19	24	38	30	20	61	20	12	31	323
5 to 9 years . . . . .	40	49	60	68	59	51	40	46	43	30	39	36	561
10 to 19 years . . . . .	46	54	32	30	94	58	61	79	60	54	30	36	634
20 to 29 years . . . . .	30	32	27	31	29	30	59	30	48	37	90	43	486
30 to 39 years . . . . .	32	50	71	69	63	40	41	30	30	34	40	51	551
40 to 49 years . . . . .	36	41	40	42	26	42	20	26	36	21	29	20	379
50 to 59 years . . . . .	36	30	41	40	39	32	44	37	20	38	41	50	448
60 to 69 years . . . . .	40	51	46	20	32	49	30	54	60	53	46	42	523
70 to 79 years . . . . .	50	33	36	28	20	60	46	50	42	36	61	65	527
80 years and over . . . . .	31	38	50	32	40	56	61	90	40	37	29	46	550
Still born . . . . .	58	46	32	30	45	46	35	42	41	46	36	41	498
Premature Birth . . . . .	21	16	22	13	16	14	17	14	26	18	13	24	214
Totals . . . . .	603	624	558	511	551	609	608	613	574	529	535	563	6878

SUMMARY OF MORTALITY—*Continued*

## NATIVITIES

PLACE OF BIRTH	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Detroit .....	231	348	235	294	281	306	294	287	298	297	220	237	3328
Michigan .....	90	130	40	64	86	62	101	121	44	72	54	77	941
Other States .....	61	54	70	51	43	60	54	67	47	33	40	51	631
Austria .....	6	7	10	3	0	4	10	6	3	0	1	4	54
Australia .....	2	0	4	3	1	0	2	1	1	6	3	1	24
Bohemia .....	6	7	1	0	5	9	3	0	1	1	2	1	36
Belgium .....	1	0	7	0	1	0	0	1	4	7	1	5	27
Bavaria .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada .....	47	40	31	46	41	19	20	21	54	60	33	22	434
Denmark .....	0	2	1	0	1	3	0	1	0	6	1	1	16
England .....	9	9	14	22	10	24	26	27	20	18	10	12	201
France .....	1	2	0	3	0	0	3	4	1	0	0	2	16
Germany .....	70	64	59	51	58	71	70	44	81	79	71	50	768
Greece .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Holland .....	0	1	0	0	2	0	0	2	1	0	1	1	8
Hungary .....	2	3	1	1	1	0	1	0	1	1	1	3	15
Ireland .....	19	10	17	22	6	20	14	8	25	21	23	22	207
Italy .....	1	2	0	0	0	0	0	0	1	0	0	0	4
Poland .....	1	1	4	0	0	0	0	0	0	0	0	1	7
Prussia .....	0	0	0	0	0	0	1	1	0	0	0	0	2
Russia .....	0	3	1	0	1	0	0	0	0	0	2	0	7
Scotland .....	2	7	0	6	1	4	7	1	0	3	1	2	34
Spain .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden .....	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland .....	7	8	6	2	1	0	0	0	0	0	0	0	24
Not stated .....	20	9	10	5	14	5	4	5	3	16	2	3	94
Totals .....	576	707	511	573	553	587	610	597	583	620	466	495	6878

## REPORT OF THE BOARD OF HEALTH

## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH	July, 1908												Total
	August	September	October	November	December	January, 1909	February	March	April	May	June		
I. General Diseases													
1. Typhoid Fever (Abdominal Typhus).....	12	11	15	14	11	6	3	3	6	4	7	98	
2. Typhus, Exanthematic.....	0	0	0	0	0	0	0	0	0	0	0	0	
3. Fever, Recurrent.....	0	2	0	0	0	0	0	0	0	0	0	2	
4. Fever, Malarial.....	0	0	1	0	0	2	0	0	0	0	0	3	
4a. Malarial Cachexia.....	0	0	0	0	0	0	0	0	0	0	0	0	
5. Variola.....	0	0	0	0	0	0	0	0	0	0	0	0	
6. Measles.....	0	0	0	0	1	7	1	5	4	6	4	29	
7. Scarlatina.....	0	2	3	4	3	4	2	2	1	5	7	35	
8. Whooping Cough.....	5	3	3	1	0	0	0	1	1	1	1	16	
9. Diphtheria and Croup.....	0	0	0	0	0	0	0	0	0	0	0	0	
9a. Diphtheria.....	3	3	5	6	11	13	7	7	8	4	3	81	
10. Grippe.....	0	0	0	0	0	2	1	7	0	0	0	10	
11. Miliary Fever.....	0	0	0	0	0	0	0	0	0	0	0	0	
12. Cholera, Asiatic.....	0	0	0	0	0	0	0	0	0	0	0	0	
13. Cholera, nostras.....	0	2	0	0	0	0	0	0	0	0	0	2	
14. Dysentery.....	1	5	0	1	1	0	1	0	0	0	0	10	



## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
	I. GENERAL DISEASES—Continued												
14a. Dysentery, epidemic . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Pest (Plague) . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
16. Yellow Fever . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
17. Leprosy . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
18. Erysipelas . . . . .	1	2	1	0	0	1	0	2	3	2	3	1	16
19. Other Epidemic Affections . . . . .	0	0	1	0	0	0	0	0	0	0	0	0	1
20. Purulent Infection and Septicæmia . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
21. Glanders and Farcy . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
22. Malignant Pustule and Charbon (Anthrax) . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
23. Rabies . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
24. Actinomycosis, Trichinosis, etc. . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
25. Pellagra . . . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
26. Tubercle of Larynx . . . . .	3	2	0	2	0	1	1	0	0	0	0	0	9
27. Tubercle of Lungs . . . . .	36	26	23	37	30	29	30	28	57	32	43	28	399
28. Tubercle of Meninges . . . . .	3	1	1	0	2	2	1	3	3	6	5	7	34
29. Tubercle, Abdominal . . . . .	1	3	0	0	3	2	0	2	0	1	1	0	13

## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
I. GENERAL DISEASES—Continued													
30. Pott's Disease.....	0	0	0	0	0	0	0	0	0	0	0	0	0
31. Abscess, Cold and by Congestion.....	0	0	0	0	0	0	0	0	0	0	0	0	0
32. White Tumors (White Swellings).....	0	0	1	0	0	0	0	0	0	0	0	0	1
33. Tubercle of other Organs.....	0	0	0	0	0	0	0	0	0	0	0	0	0
34. Generalized Tubercle.....	0	0	0	0	0	0	0	0	0	0	0	0	0
35. Scrofula.....	0	0	0	0	0	0	0	0	1	0	0	0	1
36. Syphilis.....	17	6	5	8	1	4	9	6	13	8	11	4	92
37. Bleorrhagia of the Adult.....	0	0	0	0	0	0	0	0	0	0	0	0	0
38. Gonococic Infections of Children.....	0	0	0	0	0	0	0	0	0	0	0	0	0
39. Cancer and Other Malignant Tumors of the Buccal Cavity	0	0	0	0	0	0	0	0	0	0	0	0	0
40. Cancer and Other Malignant Tumors of the Stomach and	0	0	0	0	0	0	0	0	0	1	0	0	1
Liver.....	9	6	4	11	12	13	12	8	17	8	17	14	131
41. Cancer and Other Malignant Tumors of the Peritoneum,													
Intestines and Rectum.....	3	3	1	2	3	3	0	0	0	0	1	1	17
42. Cancer and Other Malignant Tumors of the Female													
Genitals.....	3	2	8	3	3	3	5	2	3	0	2	5	39







## SUMMARY OF MORTALITY—Continued

[illegible]



## SUMMARY OF MORTALITY—Continued

## CAUSES OF DEATH

## V: Diseases of the Digestive Apparatus

[illegible]





## SUMMARY OF MORTALITY—Continued

[illegible]

## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
<b>VIII. Diseases of the Skin and Cellular Tissue</b>													
142. Gangrene.....	0	0	0	0	0	0	0	0	0	0	0	0	0
143. Furuncle (Carbuncle).....	0	0	0	0	0	0	0	0	0	0	0	0	0
144. Abscess Warm.....	1	5	1	4	1	2	3	3	3	4	1	3	31
145d. Other Diseases of the Skin and its Adnexa .....	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>IX. Diseases of the Organs of Locomotion</b>													
146. Affections of the Bones (nontuberculous).....	0	0	0	0	1	1	0	0	0	0	0	0	2
147. Arthritis and other Affections of the Joints (Tubercle and Rheumatism excepted) .....	0	0	0	0	0	0	0	0	0	0	0	0	0
148. Amputation .....	0	0	0	0	0	0	0	0	0	0	0	0	0
149. Other Affections of the Organs of Locomotion.....	0	0	2	0	0	0	0	0	0	0	0	0	2
<b>X. Malformations</b>													
150. Malformations, Congenital (Stillbirth excepted).....	0	0	0	0	0	6	4	0	0	0	0	1	11
<b>XI. Early Infancy</b>													
151. Congenital Icterus, Debility and Sclerema .....	0	0	2	0	1	0	1	0	0	0	0	0	4
152. Other Diseases of Early Infancy .....	47	50	49	58	39	29	23	29	26	36	55	30	471
153. Lack of Care .....	0	1	0	0	0	0	1	0	0	0	0	0	2

## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH	July, 1908												Total
	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	
<b>XII. Old Age</b>													
154. Senile Debility .....	27	22	23	22	28	26	29	20	26	32	27	35	317
<b>XIII. Affections caused by External Causes</b>													
155. Suicide by Poison .....	3	3	3	6	3	4	4	3	1	8	6	4	48
156. Suicide by Asphyxia .....	0	0	1	0	0	0	0	0	0	0	0	0	1
157. Suicide by Hanging or Strangulation .....	0	0	0	0	0	2	0	3	1	0	1	0	7
158. Suicide by Submersion .....	0	0	1	0	0	1	0	0	0	0	0	0	2
159. Suicide by Firearms .....	1	2	3	1	0	2	2	0	2	3	1	2	19
160. Suicide by Cutting Instruments .....	0	1	1	0	0	0	0	0	1	0	0	0	3
161. Suicide by Jumping from high places .....	0	0	0	0	0	0	0	0	0	0	0	0	0
162. Suicide by Crushing .....	0	0	0	0	0	0	0	0	0	0	0	0	0
163. Other Suicides .....	0	0	0	0	0	0	0	0	0	0	0	0	0
164. Fractures .....	5	6	10	14	7	4	6	4	3	7	9	11	86
165. Luxations .....	0	0	0	0	0	0	0	0	0	0	0	0	0
166. Other Accidental Traumatisms .....	13	13	17	8	11	15	9	9	7	10	11	13	136
167. Burns and Scalds .....	2	0	3	2	4	4	2	0	1	1	4	2	25
168. Burning by Corrosive Substances .....	0	0	0	0	1	0	0	0	0	0	0	0	1

## SUMMARY OF MORTALITY—Continued

CAUSES OF DEATH													
XIII. AFFECTIONS CAUSED BY EXTERNAL CAUSES—Continued													
July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total	
169. Insolation.....	6	2	0	0	0	0	0	0	0	0	1	9	
170. Freezing.....	0	0	0	0	0	0	0	0	0	0	0	0	
171. Electrical Disturbances.....	0	0	0	1	0	0	0	0	0	1	0	2	
172. Accidental Submersion. ....	13	9	5	2	0	3	1	1	4	3	5	46	
173a. Inanition .....	9	9	10	9	6	10	11	13	11	3	5	100	
174. Absorption of Deleterious Gases (Suicide excepted).....	2	0	0	0	3	1	1	2	0	0	2	11	
175. Other Acute Poisonings.....	1	0	0	0	0	0	0	1	1	0	2	5	
176. Other External Violence .....	1	0	1	2	1	0	1	1	1	0	0	8	
XIV. Ill-Defined Diseases													
177. Dropsy.....	0	4	3	4	5	1	4	5	2	3	4	36	
178. Sudden Death.....	0	0	0	0	0	0	0	0	0	0	0	0	
179. Unspecified or Ill-defined causes of Death .....	0	1	1	3	1	0	0	0	0	0	0	6	
180. Still Birth .....	58	46	32	30	45	46	35	42	41	46	36	41	
181. Premature Births .....	21	16	22	13	16	14	21	14	26	18	13	24	
Totals.....	374	358	309	263	236	242	235	222	232	275	256	242	



## CONTAGIOUS DISEASES

Table showing deaths by months from contagious diseases

DISEASE	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Diphtheria...	3	3	5	6	11	13	11	7	7	8	4	3	81
Scarlet Fever.	0	2	3	4	3	4	2	2	2	1	5	7	35
Smallpox....	0	0	0	0	0	0	0	0	0	0	0	0	0

Table showing present condition of contagious diseases

DISEASE	DURING THE YEAR		
	New cases reported	Recoveries reported	Deaths
Diphtheria . . . . .	943	862	81
Scarlet Fever . . . . .	517	482	35
Smallpox . . . . .	11	11	0

## CONTAGIOUS DISEASES

Table showing cases reported by months in comparison with preceding years.

MONTH	DIPHTHERIA				SCARLET FEVER			
	1906	1907	1908	1909	1906	1907	1908	1909
July . . . . .	31	29	31	31	5	31	23	17
August . . . . .	38	27	42	33	12	24	14	20
September . . . . .	31	43	36	89	8	32	33	28
October . . . . .	96	50	76	128	27	32	43	32
November . . . . .	105	64	65	128	22	60	73	51
December . . . . .	102	66	62	121	44	54	58	63
January, 1909 . . . . .	108	69	42	100	58	42	71	43
February . . . . .	61	45	42	69	40	49	47	43
March . . . . .	73	63	39	72	106	44	71	56
April . . . . .	69	56	29	51	81	27	66	46
May . . . . .	58	50	24	54	58	35	45	70
June . . . . .	32	34	35	67	26	13	25	48
Total . . . . .	804	596	523	943	487	443	569	517

## MEDICAL INSPECTION OF SCHOOLS

Number of pupils examined during year ending June 30, '09 .....	50,501
Number of pupils excluded .....	3,499

## CAUSES OF EXCLUSION

Scarlet fever .....	12
Diphtheria .....	18
Tonsillitis .....	818
Measles .....	170
Roetheln .....	41
Mumps .....	106
Smallpox .....	0
Chicken-pox .....	226
Whooping-cough .....	77
Pediculosis .....	505
Ring Worm .....	128
Impetigo .....	477
Scabies .....	171
Other Diseases .....	750
Total .....	3,499

Number of pupils in whom one or more physical defects were found and corrections of same recommended .....	2,118
--	-------

## PHYSICAL DEFECTS FOUND

Defective eye-sight .....	598
Diseases of eyes .....	274
Diseases of ears .....	30
Defective hearing .....	106
Adenoids .....	347
Enlarged tonsils .....	357
Enlarged tonsils and adenoids .....	202

## REPORT OF THE BOARD OF HEALTH

Curvature of spine .....	7
Disease of the heart .....	6
Disease of the lungs .....	2
Defective teeth .....	110
Extreme nervousness and mental deficiency...	27
Enlarged cervical glands.....	13
Malnutrition and anaemia.....	14
Goitre.....	5
Chorea.....	7
Defective speech.....	2
Paralysis.....	2
Nasal polypi.....	2
Phimosis .....	6
Cleft palate.....	1
<hr/>	
Total.....	2,118

## SCHOOL NURSING

Visits to schools.....	1169
"    homes of pupils.....	3723
Cared for at school clinic .....	4651
Children taken to dispensaries.....	158
Personally cleaned heads.....	46

## Of the visits made to homes

For contagious diseases. ....	2262
For correction of physical defects....	461

## The physical defects and results obtained were as follows :

Defective eye-sight.....	152	corrected	76
Diseases of eye (most conjunctivitis)	79	"	79
Diseases of ear.....	28	"	16
Defective hearing.....	12	"	12
Adenoids.....	82	"	50
Enlarged tonsils .....	66	"	25
Defective teeth.....	36	"	27
Phimosis .....	6	"	4
<hr/>		<hr/>	
Totals .....	461		289



## BIRTHS REPORTED

For the fiscal year ending June 30, 1909.

MONTH	Male	Female	Total
July, 1908 .....	487	439	926
August .....	462	414	876
September .....	446	394	840
October.....	478	328	806
November .....	410	387	797
December.....	374	361	735
January, 1909. . .	409	389	798
February .....	454	397	851
March.....	443	378	821
April.....	462	452	914
May .....	369	370	739
June .....	418	364	782
Total.....	5212	4673	9885

Birth rate per M per annum 23.10 on a basis of an estimated population of 428,000 inhabitants.

SUMMARY OF MORTALITY—*Continued*

Table showing computation for the death rate of the city.

MONTH	Total	Still-born	Died Outside of City	Premature Birth	Net
July, 1908.....	612	58	37	21	496
August ... ..	605	46	45	16	498
September .....	552	32	38	22	460
October.....	552	30	38	13	471
November .....	545	45	39	16	445
December.....	505	46	38	14	407
January, 1909 .....	565	35	37	21	472
February .....	525	42	38	14	431
March .....	673	41	37	26	569
April .....	653	46	42	18	547
May .....	589	36	50	13	490
June .....	502	41	32	24	405
Total .....	6878	498	471	218	5691
Still-born premature birth, and died outside city .....	1187				
Net total. ....	5691				

Death rate per 1000 per annum 13.29 on a basis of an estimated population of 428,000 inhabitants. During the fiscal year ending June 30, 1909, there were copied 6878 certificates of deaths and 9885 certificates of births, and transcripts of same, forwarded to the Secretary of State at Lansing, Mich.

It is also the duty of the Registrar to copy household and final reports of all cases of diphtheria and scarlet fever occurring within the city limits, and mail the same each day to the Secretary of the State Board of Health.

During the fiscal year ending June 30, 1909, 582 certified copies of death certificates were issued of these 91 were given free to widows, the same being desired by them for use in pension claims, and for the remainder 491 copies, a charge of fifty cents each was made, the amount received therefore was \$245.50, and said sum deposited at the office of the City Treasurer.

Respectfully submitted,

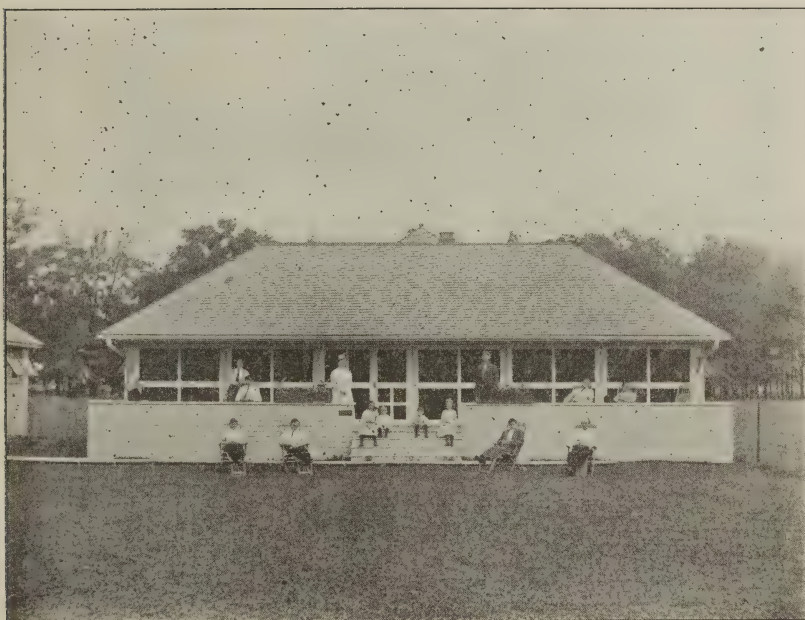
HENRY T. RENSHAW,

*Registrar.*



RED CROSS COTTAGE





BLUE STAR COTTAGE

## REPORT OF MEDICAL INSPECTOR

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DETROIT, MICHIGAN, July 1, 1909

*Guy L. Kiefer, M D., Health Officer.*

DEAR SIR:—I have the honor to submit the following report concerning the work which has been done in connection with tuberculosis for the fiscal year ending June 30, 1909.

The progress made in the fight against tuberculosis during the past year has been quite encouraging. The education of the public with regard to the nature of tuberculosis and the manner in which it is transferred from individual to individual has apparently advanced to a sufficient extent to be productive of practical results. Thus whereas a year ago practically all patients coming under observation at the clinic were well advanced cases to whom no hope of ultimate recovery could be given, in June 1909 out of 35 new patients presenting themselves for examination 12 proved to be suffering with the disease in an incipient form. Ten of these patients came to the clinic because other members of their household were suffering with the disease and their own general health appeared to be below par. While people have evidently learned that tuberculosis must be regarded as contagious and are consequently frequently notifying the Health Office of where cases exist and require disinfection, they have at the same time for the most part adopted a wonderfully sane attitude towards this disease. They have apparently learned that tuberculosis is a disease in which contagion can be avoided when proper precautions are taken and that it is curable in its early stages. As an example of the truth of this last statement may be mentioned

the almost universal optimistic attitude of clinic patients in whom a diagnosis of incipient tuberculosis is made.

The work which has been done during the past year may be conveniently described under two heads, first, the work of the clinic, second, the hospital work.

#### TUBERCULOSIS CLINIC

During the year ending June 30th 1909, 459 persons have presented themselves for examination at the clinic, the total number of visits made to the clinic by all patients being 2008. The routine followed at the clinic may be described as follows: All patients presenting themselves for the first time are subjected to a thorough physical examination of the chest, their history is taken and they are furnished with a proper receptacle for the collection of a sample of sputum which they are requested to bring with them on their following visit. Before their return to the clinic they are visited in their home by the nurse connected with the clinic who investigates the conditions under which they live, the precautions, if any, which are taken with regard to the disposal of sputum and whether or not they are financially able to secure such nourishment as is necessary for their welfare. The report of the nurse is made to the physician in charge of the clinic before the second visit of the patient. Tuberculous patients who cannot afford to secure milk and eggs for themselves are supplied with these essentials through the clinic. During the past year there have been dispensed to needy tuberculous patients 3,450 dozens of eggs and 12,498 quarts of milk. All patients without exception are given detailed instructions with regard to the proper disposal of their sputum and are furnished with gauze and sputum boxes to be used for collecting the material expectorated. Through the medium of the clinic we have been enabled to follow these patients and to become acquainted with any change in address and to care for the disinfection of vacated premises. For example several patients have changed their residence three or four times during the past year and in each instance we have been able to disinfect the vacated premises. Where patients have been confined

to their bed and are unable to attend the clinic visits have been made to their home by the physician. During the past year 309 visits of this nature have been made. Wherever we have found a case of tuberculosis the other members of the household have been advised of the desirability of placing themselves under temporary observation at the clinic. Many have availed themselves of the opportunity thus afforded and a large number of the incipient cases at present attending the clinic have been discovered in this manner.

#### TUBERCULOSIS HOSPITAL WORK

The work of the hospital may in a way be called supplemental to that of the clinic. The primary object of the hospital is not so much the cure of the individual patient as practical instruction in the manner in which he should live in order to further his own interests and especially to prevent the spread of the disease to others. Incidentally the patient is the recipient of the best treatment while in the hospital and everything possible is done to help him to overcome the disease.

During the past year 101 patients have received treatment in the hospital for periods varying from a few days to 21 weeks. Patients have been received in all stages of the disease without regard as to whether there is hope for their ultimate recovery or not. For purposes of convenience therefore the cases admitted have been arbitrarily divided into three classes as follows:

1st. Early stage, in which recovery with entire arrest of the disease process should occur under favorable circumstances.

2nd. Moderately advanced stage, in which an arrest of the disease only can be expected. The majority of these cases can be temporarily arrested and a few may be for all practical purposes cured.

3rd. Advanced stage, in none of these can a permanent arrest of the disease process be expected. Temporary arrest may occur in a small proportion of these cases.

Among the 101 patients admitted during the year 27 have been classified as belonging to the first stage, 34 to the second, and 40 to the third stage of the disease.



The following is a tabulated report of the hospital cases:

1. EARLY STAGE, 27 CASES

Case	Length of stay in hospital	Gain or loss in weight	Present Condition
1 A. S.	13 Weeks	Plus 15 lbs.	At home in country
2 H. G.	16 "	" 10 "	State Sanatorium, Howell
3 H. R.	3 "	" 21 "	At home in city
4 W. S.	11 "	" 16 "	At home in country
5 J. M.	10 "	" 4 "	At home in city
6 J. U.	9 "	" 9 "	At home working
7 F. S.	9 "	" 24 "	At home working
8 M. Z.	1 "	" 2½ "	National Jewish Hospital, Denver
9 J. P.	10 "	" 14 "	At home working
10 L. E.	2 "	" 2 "	At home working
11 M. H.	1 "	" 1 "	At home in city
12 I. T.	3 "	" 7 "	At home in city
13 A. F.	9 "	" 20 "	At home working
14 F. G.	10 "	" 3 "	Gone to New York
15 A. L.	10 "	Minus 1 "	Remaining in hospital
16 J. N.	12 "	Plus 15 "	Remaining in hospital
17 L. L.	6 "	" 6 "	At home working
18 P. W.	6 "	" 9 "	At work in city
19 P. O.	4 "	Minus 4 "	At work in city
20 M. C.	18 "	Plus 24 "	At home working
21 A. W.	1 "	" 2½ "	Remaining in hospital
22 M. K.	1 "	" 1 "	Remaining in hospital
23 M. M.	1 "	" 1½ "	Remaining in hospital
24 C. W.	2 "	" 3 "	Remaining in hospital
25 P. W.	4 "	" 6 "	Remaining in hospital
26 M. W.	2 Days		Went to Denver
27 M. K.	7 Weeks	" 1 "	At home in city

## 2. MODERATELY ADVANCED, 34 CASES

Case	Length of stay in hospital	Gain or loss in weight	Present Condition
1 L. C.	21 Weeks	Plus 16 lbs.	At home working
2 W. S.	9 "	" 5 "	At home working
3 R. P.	4 "	" 0 "	At home working
4 C. J.	15 "	" 25 "	State Sanatorium, Howell
5 E. G.	1 "	" 1 "	Lives in city
6 M. S.	15 "	" 20 "	Lives in city working
7 M. H.	17 "	" 34 "	Lives in city working
8 M. S.	3 Days		Living in city
9 T. V.	4 "	" 1½ "	Living in city
10 F. F.	4 Weeks	Minus 2 "	Gone to northern part state
11 M. F.	4 "	Plus 1½ "	Gone to northern part state
12 D. F.	3 "	Minus 2¼ "	Gone to New York
13 M. U.	4 "	Plus 3 "	Living in city
14 F. R.	6 "	" 6 "	Living in city
15 J. B.	10 "	" 10 "	Remaining in hospital
16 L. C.	11 "	" 9 "	Remaining in hospital
17 J. C.	8 "	" 5 "	At home in city
18 J. H.	3 "	" 1 "	At home working
19 A. H.	13 "	" 8 "	Remaining in hospital
20 M. G.	17 "	" 11 "	At home in city
21 A. H.	9 "		At home in city
22 G. M.	14 "	" 12 "	At home in city
23 M. F.	1 Day		Died after returning home
24 L. S.	12 Weeks	Plus 8 lbs.	At home in city
25 J. H.	15 "	" 22 "	At home working
26 G. B.	14 "	" 12 "	At home
27 A. S.	1 "	" 1 "	Remaining in hospital
28 G. L.	4 Days	Not weighed	Transferred (appendicitis)
29 M. N.	1 Week	Plus 1 lbs.	Remaining in hospital
30 L. B.	3 "	Minus 3 "	Remaining in hospital
31 T. B.	5 "	Plus 10 "	Remaining in hospital
32 A. J.	1 "	Not weighed	Whereabouts unknown
33 M. D.	3 "	Minus 2 "	Remaining in hospital
34 A. H.	4 Days	Not weighed	Whereabouts unknown

## 3. ADVANCED, 40 CASES.

Case	Length of stay in hospital	Gain or loss in weight	Present Condition
1 A. N.	6 Weeks	Too sick not weighed	Died 3 weeks after leaving hosp'l
2 A. G.	7 "	Plus 7 lbs.	Living in city
3 M. C.	18 "	" 28 "	In hospital, working
4 M. O.	10 "	Minus 6 "	Died
5 C. A.	21 "	Plus 14 "	Living in city
6 M. G.	5 "	" 5 "	Living in city
7 J. P.	6 "		Living in city
8 M. F.	8 "	" 6 "	Living in city
9 S. G.	5 "	Not weighed	Died from hemorrhage in hospital
10 H. W.	4 "	Not weighed	Died 6 weeks after leaving hospital
11 E. S.	1 "	Plus 2½ lbs.	Went to Eloise
12 M. V.	17 "	" 12 "	Living in city
13 F. H.	1 "	Not weighed	Died 3 weeks after leaving hospital
14 F. R.	3 "	Not weighed	Died 3 months after leaving hosp'l
15 J. K.	5 "	Plus 4 lbs.	Living in city
16 F. K.	2 "	" 6 "	Living in city
17 J. C.	5 "	" 7½ "	Living in city
18 A. M.	1 Day	Not weighed	Living in city
19 G. B.	1 Week	Plus 1½ lbs.	Living in city
20 S. B.	3 "	" 6	Died 2 month after leaving hosp'l
21 E. F.	14 "	Minus 1½ "	Living in city
22 J. B.	4 "	Plus 7½ "	Went home to sit by the fire, dead
23 H. A.	1 "	Minus 1 "	Living in city
24 M. T.	6 "	Plus 12 "	Living in city
25 J. H.	8 "	Minus 2	Died 4 weeks after leaving hospital
26 J. M.	5 Days	Not weighed	Died 4 weeks after leaving hospital
27 M. D.	11 Weeks	Plus 6 "	Remaining in hospital
28 M. S.	7 "	" 1	Remaining in hospital
29 J. B.	11 Days	Not weighed	Died of hemorrhage in hospital
30 E. T.	8 Weeks	Plus 3 "	At home in city
31 J. W.	1 "	Not weighed	Died 5 weeks after leaving hospital
32 J. M.	15 "	Minus ½ "	Whereabouts unknown

3. ADVANCED, 40 CASES—*Continued*

Case	Length of stay in hospital	Gain or loss in weight	Present Condition
33 G. R.	10 "		Died 4 weeks after leaving hospital
34 M. G.	1 Day	Not weighed	Remaining in hospital
35 P. M.	3 "	Not weighed	Remaining in hospital
36 C. M.	1 Week		Remaining in hospital
37 G. C.	1 "	Not weighed	Remaining in hospital
38 C. H.	3 "		Remaining in hospital
39 T. H.	4 "	Not weighed	Remaining in hospital
40 S. W.	7 "	Minus 4 lbs.	Remaining in hospital

From an examination of the above tables we see that among the first stage cases 24 out of the 26 patients remaining in the hospital for an interval of at least one week showed improvement in weight, this improvement in weight being in all cases accompanied by a corresponding improvement in their general condition. In other words 92.6 per cent. of the early stage cases did well during their hospital residence. Among the 34 cases classified as moderately advanced 24 showed improvement in weight and general condition, a percentage of 70. Out of 40 advanced cases 17 showed improvement in weight and general condition during their hospital stay. In other words 42.5 per cent. of the advanced cases showed temporary improvement during their stay in the hospital.

While it is too early to state whether the early and moderately advanced cases which have gained during their stay in the hospital have acquired a permanent arrest of their disease process, those individuals which have been under observation for from 3 to 4 months since their residence in the hospital have held the ground

which they gained in a most satisfactory manner. Moreover these cases if they follow the instructions which have been given them during their stay in the hospital will cease to be sources of danger and infection to the community in which they live.

Respectfully yours,

V. C. VAUGHAN, JR.,

*Medical Inspector.*



## REPORT OF MEDICAL INSPECTOR AND DISINFECTOR

---

DETROIT, MICHIGAN, July 1, 1909

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—I have the honor to submit the following report as Medical Inspector and Disinfector for the fiscal year ending June 30th, 1909.

### REMARKS

It has been my pleasure to submit to you, from time to time, recommendations for the betterment of the service in my district, and to call your attention to the sanitary conditions observed by me, especially in the eighteenth ward. The remedy for existing evils having been applied as far as practicable at this time, through your Sanitary Engineer, removes the necessity for further comments, except to say that a noticeable reduction in the number of contagious diseases is apparent for the present fiscal year as compared with the past.

I trust that, with the introduction of new pavements, and drainage, the removal of the public dumping ground now located in the heart of the ward, and just a block away from one of the main arteries of traffic and business, together, with the increasing co-operation on the part of the citizens thereof, your hopes for ideal conditions will be realized ; to that end my best effort shall be directed.

## SMALLPOX

The annual visit of our ancient enemy smallpox was noticeable to a small degree during the present year. One half of the number of cases appearing as the previous year and none of these originating in the city. Were it not for the position it occupies in the realm of infectious diseases, I would pass it over in silence, for the types were of the mildest character, with an inconsequential duration. Eleven houses were disinfected, two patients treated by me in their homes and the customary rules observed as heretofore.

## SCARLET FEVER

While the number of cases have been slightly reduced the work of the Inspector has increased, by the frequent calls for purposes of diagnosis. Were it not for the personal attention given most of these calls by the Health Officer, it would be impossible to perform with any degree of success the complex duties of the Medical Inspector. With considerable satisfaction I can report a constantly increasing cooperation on the part of the people in my district; to say that this has been accomplished solely through our own efforts would be a poor tribute indeed to the earnest, conscientious assistance given by the family physicians, who have been so uniformly courteous to your inspector and so painstaking in their instruction to their clientele.

## DIPHThERIA

The prevalence of sore throats, with apparent absence of membrane, together with serous nasal discharge, so disarmed the profession that the underlying cause was overlooked, and the clinical manifestation was attributed to cold, until a complete examination in one of the schools of all children in attendance, by culture, revealed the presence of Klebs Loeffler Diphtheria Endemic in the district. As a consequence my summary will show an increase of infected centers of a trifle over fifty per cent as compared with previous report. A rigid application of the customary preventive measures soon controlled the threatened epidemic, and the close of the year finds the territory at its normal status.

## MEASLES

Measles occupied the commanding position of the infectious group coming under my observation during the year. The fatalities therefrom seem of sufficient gravity to deserve special mention at this time. This disease has from time immemorial been so minimized that an indifference on the part of both physicians and parents has arisen to the detriment of the little sufferers.

I would most respectfully suggest that you sound a warning note upon this subject, in such manner as your best judgment might indicate, in the season of its prevalence, to the end that the calamity of the present year may be subverted in the future.

## TUBERCULOSIS AND PNEUMONIA

You having organized the tuberculosis sanatoria with a special staff, and systemized the out door department of the work, relieving me from all duties in connection therewith, removes discussion of the subject from this and future reports. The systematic tabulation of pneumonia, and methods for its ultimate eradication, will in due time receive your consideration, mention is here made simply to recall the recommendations of a former report. It is to be regreted that the appropriating power could not see the wisdom of a larger clerical force to aid you in executing the plans mapped out for the current fiscal year, you can hope however, when contrasting the accomplishment of the present with that of the past, that the future will find your recommendations for this branch of the service equally adhered to.

The following is a summary of the work performed during the year :

## DISINFECTIONS

Scarlet Fever.....	227
Diphtheria .....	389
Smallpox.....	11

Inspections for purposes of diagnosis 105 calls, divided as follows:

Chickenpox.....	12
Diphtheria .....	5
Scarlet fever.....	25
Measles.....	17
Smallpox.....	15
Acne.....	2
Tonsillitis.....	11
Croup.....	1
Scabies .....	2
Erythema .....	2
Negative calls....	13

Miscellaneous calls 47, divided as follows:

Investigations of maternity homes	
Treatment of smallpox patients in homes	
Observing houses exposed to smallpox	
And calls for purpose of vaccinating exposed persons	
Total number of calls for the year.....	779

Respectfully submitted,

J. W. AMES. M. D.,  
*Medical Inspector and Disinfectors.*

## REPORT OF MEDICAL INSPECTOR AND DISINFECTOR

---

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—Herewith I respectfully submit a summary of the work done by me as Medical Inspector and Disinfector for the fiscal year ending June 30th, 1909.

Suspicious cases investigated as follows :

Scarlet Fever .....	65
Diphtheria .....	54
Chicken-pox .....	72
Measles .....	28.....219

Calls of miscellaneous nature :

..... 144

Disinfections :

Scarlet Fever .....	290
Diphtheria .....	554
Total number of disinfections .....	844
Total number of calls on all cases .....	363

Respectfully submitted,

P. J. LORANGER, M. D.,

*Medical Inspector and Disinfector.*



## REPORT OF QUARANTINE INSPECTOR

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DETROIT, MICHIGAN, July 1, 1909

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—The following is my report for the fiscal year ending June 30, 1909, for all that part of the city lying west of 12th street, and extending to the westerly city limits:

	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Number of Visits	250	235	424	686	708	683	648	487	404	341	222	378	5466
Number of Grocery orders	27	16	38	23	51	47	75	45	20	22	24	15	403
Number of Fuel Orders	1	1	3	5	4	9	22	7	6	1	4	2	65

Respectfully submitted,

HERMAN F. BOLDT,

*Quarantine Inspector.*

## REPORT OF QUARANTINE INSPECTOR

DETROIT, MICHIGAN, July 1, 1909

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—I herewith submit the report of R. P. Vandy and myself for the fiscal year ending June 30, 1909, for that part of the city lying between St. Aubin Ave. on the east, and Twelfth St., on the west.

	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Number of Visits	124	61	178	279	426	484	404	261	490	470	702	487	4366
Number of Grocery orders	12	5	18	18	29	34	35	25	48	42	38	44	348
Number of Fuel Orders	0	1	1	3	5	4	6	6	6	4	3	2	41

This territory was under the supervision of Mr. Robert P. Vandy from July 1st, 1908 to the date of his death which occurred in April 1909, after which I took charge of it.

Respectfully submitted,

FRED G. BOYD.

*Quarantine Inspector.*

## REPORT OF QUARANTINE INSPECTOR

DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—The following is my report for the fiscal year ending June 30, 1909:

	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Number of Visits	92	66	100	295	252	246	294	216	264	540	275	192	2832
Number of Grocery orders	4	8	19	28	28	30	38	31	35	48	18	16	303
Number of Fuel Orders	0	0	1	1	4	7	5	1	4	5	1	0	29

Respectfully submitted,

B. F. SCHELLBERG,  
*Quarantine Inspector.*

## REPORT OF SPECIAL DISINFECTOR

DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer:*

DEAR SIR:—The following report for the fiscal year ending July 1st, 1909, is respectfully submitted.

MONTH	Funerals Attended		DISINFECTIONS						
	Diphtheria	Scarlet Fever	Houses for Tuberculosis	Houses for Pneumonia	Houses for Meningitis	Houses for Typhoid Fever	Parcels of Clothing	Persons	School Rooms
July, 1908 .....	3	3	43	20	19	3	12	9	...
August .....	...	3	33	26	18	7	5	6	....
September .....	6	2	30	27	16	16	11	12	57
October. ....	4	4	34	29	12	8	56	18	101
November .....	5	10	42	48	6	8	32	14	105
December.....	12	4	30	51	7	9	25	21	74
January, 1909.....	12	2	39	61	11	4	19	17	30
February .....	10	3	34	83	7	1	20	13	36
March.....	6	3	56	113	15	2	31	13	41
April.....	8	4	41	97	23	2	20	16	15
May .....	5	4	46	65	7	5	41	14	10
June....	3	2	29	40	15	6	44	14	11
Total.....	74	44	457	660	156	71	316	167	480

Respectfully submitted,

FRED G. BOYD,

*Special Disinfector.*

## REPORT OF SMOKE INSPECTOR

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DETROIT, MICHIGAN, July 1st, 1909.

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—I respectfully submit the following as my report for the year ending June 30th, 1909.

Number of observations....	1544
Number of interviews and instructions.....	323
Number of notices served, No. 1, 151; No. 2, 38.....	189
Number of letters mailed.....	176
Number of letters received ..	166
Number of mechanical stokers installed ...	27
Number of mechanical stokers in course of installation .....	10
Number of stokers improved through changes.....	25
Number of automatic smoke preventing devices installed.....	40
Number of steam jet devices installed.....	22
Number of complaints made in Recorder's Court.....	43
Number of convictions in Recorder's Court.....	31
Number of cases sentence suspended .....	19
Number of fines imposed.....	6
Number of cases taken under advisement.....	4
Number of cases dismissed.....	1
Number of cases dismissed not guilty.....	1
Number of cases pending.....	13
Number of cases withdrawn because of abatement.....	2
Number of abatements through visits and interviews.....	137
Amount of fines imposed, \$15, \$15 \$25, \$25, \$100, \$10.....	\$190



## YEARLY REPORT, JULY, 1909

Number of complaints made in Recorder's Court, 43 as follows:

Art Stove Co., plead guilty, nuisance abated, sentence suspended.  
Thos. Costello, tried, dismissed by the Court.  
Crown Hat Co., tried, found guilty, nuisance abated, sentence suspended.  
Empire Laundry, tried, convicted, nuisance abated, sentence suspended.  
Farrand Williams & Clark, tried, convicted, nuisance abated, sentence suspended.  
Foster Smelting Co., plead not guilty, taken under advisement.  
R. Hirt Jr., tried, found guilty, fined \$15.  
Merz Capsule Co., tried, convicted, nuisance abated, sentence suspended.  
National Laundry, tried, convicted, nuisance abated, sentence suspended.  
Nelson-Baker & Co., tried, convicted, nuisance abated, sentence suspended.  
Peninsular Stove Co., tried, convicted, nuisance abated, sentence suspended.  
Progressive Knitting Mills, plead guilty, nuisance abated, sentence suspended.  
Ruhl Bakery, plead guilty, nuisance abated, sentence suspended.  
Standard Laundry, plead guilty, nuisance abated, sentence suspended.  
Sanatas Laundry, tried, case dismissed, abated.  
Peter Stenius, plead guilty, nuisance abated, sentence suspended.  
P. Wroblewski, tried, convicted, nuisance abated, sentence suspended.  
American Lady Corset Co., plead guilty, fined \$15.  
Detroit United Ry., tried, convicted, fined \$25.  
Detroit United Ry., tried, convicted, fined \$25.  
Grand Trunk Ry. (Sta.), tried, convicted, fined \$100.  
Excelsior Laundry, tried, convicted, nuisance abated, sentence suspended.  
A. Booth & Co., nuisance abated, case dismissed.  
Detroit Belle Isle & Windsor Ferry Co. (2), tried, taken under advisement.  
White Star Line, tried, taken under advisement.  
Detroit Seamless Steel Tubes Co., tried, under advisement.  
Campau Bldg., tried, convicted, ordered to abate nuisance.  
John Laur, plead not guilty, case pending.  
McCord Mfg. Co., case pending.  
Western Malleable Steel Co., plead guilty, case pending.  
U. S. Heater Co., plead guilty, case pending.  
Murphy Power Co., tried, convicted, nuisance abated, sentence suspended.  
Detroit Copper & Brass Rolling Mills, case pending.  
Buhl Malleable Co., plead guilty, case pending.  
Detroit Soap Co., plead guilty, nuisance abated.  
Detroit Railroad Elevator Co., tried, continued indefinitely.  
Parke-Davis & Co., plead not guilty, continued indefinitely.

Diamond Match Co., nuisance abated, sentence suspended.	
Pere Marquette R. R., tried, convicted, fined \$10. Locomotive No. 467.	
Pressed Steel Sanitary Co., tried, convicted, nuisance abated, sentence suspended.	
Welded Steel Bbl. Co., plead guilty, nuisance abated, sentence suspended.	
Detroit Picture Frame Co., tried, nuisance abated, sentence suspended.	
Great Lakes Engineering Co., (entd. 1908) abated, sentence suspended.	
Greenslade, 252 Gibson, (entd. 1908) abated, sentence suspended.	
Moses Weiswaser, (entd. 1908) plead guilty, nuisance abated, sentence suspended	
Estimated cost of mechanical stokers installed and in course of being	
installed.....	\$29,600 00
Estimated cost of automatic smoke preventing devices installed.....	6,560 00
Estimated cost of steam jets installed.....	220 00
<hr/>	
Total.....	\$36,380 00

Places where mechanical stokers were installed and are being installed during the year are as follows, those marked \* are in course of construction.

Solvay Process Co.....	6
Detroit Chemical Co.....	1
Packard Motor Car Co. ....	4
Detroit Soap Co. ....	1
.....	1
*Board of Education, Eastern High School.....	1
*Board of Education, Houghton School.....	1
*Board of Education, Eastabrooke School.....	1
*Board of Education, Campbell School .....	1
*Board of Education, Rose School .....	1
*Board of Education, Higgins School .....	1
*Board of Education, Maybury School. ....	1
Kemiweld Can Co.....	1
*Scotten-Dillon Tobacco Co.....	3
American Brewing Co.....	1
Roberts Brass Co.....	1
Detroit Copper & Brass Rolling Mills.....	2
Parker-Webb & Co.....	2
Sullivan Packing Co.....	3
Detroit Municipal Lighting Co.....	4
<hr/>	
Total .....	37

Places where automatic smoke preventing devices were installed:

Crawford Laundry.....	1
Detroit Chemical Works.....	5
Detroit Loose Scarf Collar Co.....	2
Detroit United Railway, Car Shops.....	2
Detroit Chair Mfg. Co.....	1
Everitt-Metzgers-Flanders Automobile Co.....	2
Fisher Body Co.....	1
Michigan Laundry.....	1
Merz Capsule Co.....	1
LaMeasure Laundry.....	1
Myll's Planing Mill.....	1
National Can Co.....	2
Stephen Pratt.....	1
Murray W. Sales Co.....	1
Union Brewing Co.....	2
Wayne Soap Co.....	1
American Car & Foundry Co. (Peninsular Plant).....	2
Briscoe Mfg. Co.....	2
C. H. Haberkorn & Co.....	1
Str. Lansdowne.....	1
Michigan Ornamental Glass Co.....	2
Gordon & Pagel.....	1
A. Booth & Co.....	1
Detroit Seamless Steel Tubes Co.....	1
Western Malleable Steel Co.....	1
United States Heater Co.....	1
Free Press Printing Co.....	1
Cowles & Danziger.....	1
Total.....	40

#### ANNUAL REPORT

The forgoing detailed statements give a general idea of the work done by the Smoke Department so far as it applies to factories, but much time has been taken up with work of which no correct record has been kept. I refer to looking into complaints against private dwellings, apartment buildings and all that many

such complaints entail, such as neighbors quarrels, low back kitchen chimneys, etc., which the Smoke Inspector is expected to settle and all requires a large part of our time.

Another thing that takes up a considerable portion of our time is the Court cases which are continued from time to time; for instance a case is continued for two weeks to allow defendant to abate the nuisance. In the meantime we are expected to take new records of the chimney and be able to report if any improvement has been made. This mode of procedure would be all right for once, but when a case is continued four, five or six times and sometimes eight or ten times, you can easily understand the unnecessary time required of us after we have proved the nuisance exists. THIS STATE OF AFFAIRS SHOULD BE REMEDIED.

One other heavy demand on our time is where parties put in smoke preventing devices not adapted to the demands made upon them and also from poor installations with the result that a number of tryouts have often to be made in an effort to make them pass muster.

So far we have made no complaints in the courts against parties who violate section four of the Smoke Ordinance, but very often devices are purchased and installed without regard to the above named section. Some of them are all right but others are not and are the ones that give trouble as a rule. It would be better for all parties to bring them to book (*if possible*) in the court.

The steamboats are still among our worst offenders, but as we have not got a decision on the last steamboat cases tried, we have not thought it advisable to waste time and create expense on new cases until we know where we are at.

On pages 80, 81, 82, 83, 84, are smoke charts showing the result of what can be done by the installation of proper devices. The improvements are very pronounced. The plant from which the charts on page 80 are taken are not being operated as they should be, however, and although the engineer and fireman have both been warned, it looks as if complaint will have to be made against them.





Hand Fired.

[illegible]

BLACK
D. BROWN
L. BROWN
FAINT
CLEAR

Total.

### Mechanical Stokers:

[illegible]

BLACK
D. BROWN
L. BROWN
FAINT
CLEAR

Total,

Briscoe Mfg. Co.

June 3-1909 - 2:34 to 3:34 P.M.

## Hand Fired:

MINUTES

[illegible]

Briscoe Mfg. Co.

June 22-1909 - 9:50 to 10:50 A.M.

With Smoke Preventing Device.

MINUTES

[illegible]



### Improved Stoker Setting.

[illegible]

## Mechanical Stokers

Malestic Building						September 16 - 1908 - 2:34 TO 3:34																																		Mechanical Stoners																										
						MINUTES																																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60							
BLACK																																																																		BLACK
D.BROWN																																																																		D.BROWN
L.BROWN																																																																		L.BROWN
FAINT																																																																		FAINT
CLEAR																																																																		CLEAR
																																																																		Total.

The number of mechanical stokers installed and in course of being installed (37) being two more than last year, along with a number of old stokers that were not satisfactory which have been remodeled and improved make a favorable showing.

From the number of automatic smoke preventing devices installed during the year it would seem as if that system of smoke prevention was gaining in favor, and so long as they prevent the emission of dense black smoke that is all that we can demand. I still venture to assert that mechanical stoking is the best, and without fear of contradiction, very much more economical.

At the Smoke Inspectors' Convention at Syracuse last month there were representatives from nearly all the important cities of the United States and Canada. A number of very interesting and instructive papers were read by very eminent men who are making a study of the smoke question in the Geological Survey Department of the Federal Government, and by others who are taking an active interest in the question of smoke prevention. The Convention was a success in every way and showed a healthy increasing interest in the subject, and adopted a resolution unanimously requesting all civic, state and federal examiners of candidates for engineer's or firemen's license to submit questions to all such candidates as to their knowledge of the principles of combustion and handling of mechanical stokers, and in the event of not answering satisfactorily a certain percentage of said questions a license be refused.

In conclusion permit me to draw your attention to a rapidly growing nuisance caused by smoke from the large number of motor cars, many of which emit unnecessary quantities of smoke. While not black, it has a very pungent disagreeable smell and I believe is unhealthy. Our present staff would not be able to cope with the situation. I am of the opinion, however, from what I see and feel nearly every day, that this matter will require early consideration.

Respectfully yours,

JOHN FAIRGRIEVE,

*Smoke Inspector.*



## REPORT OF SANITARY ENGINEER

---

DETROIT, July 1, 1909.

*Guy L. Kiefer, M. D. Health Officer.*

DEAR SIR:—I herewith submit a report of the work of the Sanitary Department for the fiscal year ending June 30, 1909.

### PLUMBING

The following table will show an increase in the amount of work performed by the plumbing inspectors over last year. This is not wholly due to any great increase in the number of rough inspections in new or old buildings, but rather to the number of final inspections made on all plumbing work installed.

I realize that the final inspection on all plumbing and drainage work is one of the most important duties performed by this department, as it has shown up a vast number of defects which would otherwise have escaped notice. It is now the endeavor of this department to at all times keep in close touch with the plumbing and drainage work from the commencement of such work until completion.

## INSPECTION OF PLUMBING AND DRAINAGE WORK

MONTH	Plumbing of Buildings			Drains	Specials	Smoke Tests	Total
	New	Old	Final				
July, 1908.....	385	136	400	425	60	3	1409
August.....	334	94	301	404	78	3	1214
September.....	303	126	276	443	63	4	1215
October.....	415	135	539	517	47	1	1654
November.....	377	93	292	326	53	11	1152
December.....	323	68	455	343	51	6	1246
January, 1909.....	281	55	238	260	25	3	862
February.....	237	60	250	245	56	6	854
March.....	368	124	389	489	58	5	1433
April.....	377	126	270	529	52	4	1358
May.....	356	144	269	626	70	7	1472
June.....	384	169	363	548	73	0	1537
Total.....	4140	1330	4042	5155	686	53	15406
Last year.....							13478
Increase.....							1928

Privy vaults removed and closets approved by the Board of Health installed :

July	Aug.	Sept	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
42	73	62	66	33	24	16	22	61	128	186	156	869

## NUISANCE COMPLAINTS

The sanitary squad for the investigation and abatement of nuisance complaints is too small to secure proper abatement of complaints received during the hot months.

The present year four officers were detailed to this department to give their entire time to this work under our direct supervision.

The following table gives the amount of work performed by these officers during the year.

Nature of complaints received in the Board of Health Office :

## NATURE OF COMPLAINTS

	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Chickens and ducks . . . . .	7	17	4	4	1	0	4	1	2	1	2	5	48
Defective plumbing . . . . .	16	11	6	6	4	11	7	6	13	6	9	23	118
Eavetroughs . . . . .	0	13	2	0	1	1	4	3	0	4	10	19	57
Filthy Alleys . . . . .	40	35	50	26	12	4	10	11	9	18	22	49	286
Filthy Barns . . . . .	16	15	4	5	3	3	1	0	0	2	5	16	70
Filthy Cellars . . . . .	5	6	2	1	0	3	1	2	1	3	10	4	38
Filthy Privies . . . . .	107	54	32	40	21	32	170	293	173	78	55	76	1131
Filthy Premises . . . . .	20	23	14	8	10	8	28	11	29	42	44	39	276
Garbage receptacles . . . . .	47	22	21	5	8	4	6	2	5	9	22	52	203
Leaking water pipes . . . . .	8	8	4	4	2	2	4	3	2	7	7	7	58
Manure (to remove) . . . . .	58	34	7	5	6	3	2	1	5	5	20	48	194
Shutting off water . . . . .	2	4	1	3	1	0	0	0	1	4	1	1	18
Stagnant water . . . . .	11	11	4	2	2	1	1	0	1	4	6	16	59
Stoppage of sewer . . . . .	2	13	8	9	9	7	2	6	11	16	21	18	122
Keeping pigs . . . . .	3	6	3	0	1	2	1	0	0	1	3	0	20
Rubbish and refuse . . . . .	9	5	6	9	6	3	5	1	2	8	9	5	69
Water in cellars . . . . .	9	22	13	10	7	7	11	12	13	17	21	21	163



Notices served by the Sanitary Police to abate nuisances and comply with City Ordinances :

	July, 1908	August	September	October	November	December	January, 1909	February	March	April	May	June	Total
Depositing filth in private places.....	19	7	23	15	6	13	63	18	24	36	44	51	319
Dead animals to remove. ....	104	88	53	50	31	26	29	24	52	57	82	106	702
To collect garbage not called for.....	36	30	54	11	7	11	6	20	16	10	19	29	249
To provide proper garbage boxes.....	427	203	277	404	220	202	266	101	234	340	414	440	3528
Filthy alleys to clean.....	488	225	396	479	535	277	241	51	186	360	316	365	3919
Yards and cellars to clean.....	90	65	57	54	31	38	35	21	58	132	116	124	821
Cow yards and barns to clean.....	20	15	9	5	17	17	2	1	3	3	5	20	107
Hog pens to clean.....	5	7	6	15	12	2	1	1	2	1	3	8	53
Horse stables and yards to clean.....	9	7	3	12	1	4	0	0	2	3	5	6	52
Privy vaults to clean.....	178	121	82	104	59	35	106	183	157	102	76	122	1325
Privies to connect with sewers.....	7	5	11	15	2	3	1	2	5	5	3	4	63
To construct suitable privies.....	24	10	9	11	1	21	145	181	100	38	23	26	589
Defective drains to repair.....	34	40	36	15	11	23	11	18	13	43	62	41	347
Drains to connect with sewers.....	7	13	12	8	2	2	0	0	1	4	9	25	83
Discharging steam into sewers.....	2	0	0	0	0	0	0	0	0	0	2	0	4
Manure to remove.....	342	123	89	113	32	30	30	6	29	57	103	175	1129
Stagnant water to abate....	38	31	20	22	17	8	19	16	13	24	32	58	291

NOTICES SERVED BY THE SANITARY POLICE





## GROCERY SUPPLIES

The clerical work of the supplies furnished by the Board of Health to families quarantined who need help, is done in this department and therefore appears in our report. All orders received from the quarantine inspectors who visit the families, are recorded in duplicate, one being kept, the other going to the contractor who furnishes the supplies. The number in the family is given with each order, from which the amount to be sent is determined. Each order, after having been received by the family, is checked by the quarantine inspector, and the monthly bill must tally with these returns before it is allowed. Thus, the city is protected from dishonesty. The original, return and bill rendered, must all agree.

The items of interest are given in tabular form.

Grocery supplies :

MONTH	Quarantined Families					City Hospital	
	No. of families Quarantined	No. of families Supplied	No. of persons Supplied	No. of days Supplied	Cost of Supplies	Care of Small-pox Patients	Care of Tuberculosis Patients
July, 1908.....	30	16	77	183	\$159 18	\$14 32	\$66 70
August.....	30	13	78	105	95 65	9 12	79 99
September.....	62	28	145	264	207 95		160 65
October.....	120	29	146	285	185 37		242 58
November.....	133	45	248	397	293 62		229 10
December.....	125	41	202	376	246 83		252 33
January, 1909.....	103	50	185	550	371 62	28 21	270 08
February.....	81	48	241	405	293 31	23 30	202 34
March.....	103	45	201	517	294 19	56 45	277 65
April.....	68	22	99	268	220 50		241 23
May.....	80	26	137	337	233 64	16 62	249 22
June.....	77	29	134	308	197 74	11 12	284 52
Total.....	1012	392	1897	3995	2,799 60	159 14	2,556 39
Last year.....	730	362	1813	.....	2,858 35		

## TENEMENTS

During the year a vast amount of work has been done by your Sanitary Engineer in cleaning up cheap lodging houses and other congested and unsanitary districts. The property located on the south east corner of Macomb and Orleans streets, known as the "Japanese Village" is now a thing of the past. This property contained a number of small, unsanitary shacks.

"The House of all Nations" on the north east corner of Champlain and St. Antoine streets, has been entirely remodeled and placed in a sanitary condition.

"Little Hungary" on the south west corner of Riopelle and Kirby streets, composed of twelve two story brick shacks housing a number of Hungarian laborers, was condemned by the Board of Health, and the premises vacated. Same is now undergoing repairs and several of these dwellings are being remodeled for store purposes.

"Tin Can Alley" on Napoleon street between St. Antoine and Hastings streets, has been improved during the year. This case is still pending and I hope soon to be able to report the destruction of several of the shacks now on the premises.

"Suicide Row" at number 6 and 8 Clinton street, has been condemned and the buildings closed. These buildings will not again be occupied untill such time as they are placed in a sanitary and habitable condition.

"The Will Allen Mission," a cheap lodging house on Cadillac Square, was condemned by the Board of Health. Your Sanitary Engineer personally superintended the disinfecting and thorough cleansing of this building. There were confiscated, removed and destroyed nearly three hundred mattresses and in the neighborhood of four hundred pillows and comforters.

## PUBLIC SCHOOL BUILDINGS

In my report last year as Special Inspector I called attention to the sanitary condition in all of the Public Schools in the city. I am now able to state that during the past year the Board of Educa-

tion has removed all of the old unsanitary closets then in use in the buildings and our schools are now equipped with modern sanitary closets.

The Board of Education has also as far as their appropriation would permit altered several of the heating and ventilating systems in use, and installed sanitary drinking fountains in a number of the schools.

#### PUBLIC SEWERS

During the last three years a large territory has been annexed to Detroit. The lack of sewers for this territory causes many complaints to reach this department. This is not only true in the outlying districts but is also true in the center of the city which is supposed to be well supplied with drainage, but the number of complaints of the flooding of basements after an ordinary rain fall, received during the past year from various locations, show the inadequacy of our sewerage systems.

#### DISPOSAL OF REFUSE

The subject of the sanitary disposal of refuse, other than clean dirt and ashes, is one which is giving your Sanitary Engineer a good deal of concern at the present time. In former years this class of refuse from both private houses and manufacturers, was dumped upon vacant and low lying lands about the city, known as public dumping grounds, but the city has grown so rapidly during recent years that these lands have been utilized for manufacturing plants, and other purposes, so that the disposal of such refuse should now be by incineration, or other sanitary method, as recommended to the Common Council by the Board of Health; and therefore this matter, should in my judgment receive the early attention of that body.

Respectfully submitted,

W. G. WILLIAMSON,

*Sanitary Engineer.*

## REPORT OF ANALYST AND BACTERIOLOGIST

DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer:*

DEAR SIR:—I beg to submit the following report of the work done in this department during the past year ending June 30, 1909.

### BACTERIOLOGICAL EXAMINATIONS

Cultures for Bacillus Diphtheriæ. . . . .	1514
Cultures in which Bac. Diph. were found. . . . .	419
Cultures in which Bac. Diph. were not found. . . . .	1095
Sputa for Bacillus Tuberculosis . . . . .	547
Specimens in which Bac. Tbc. were found. . . . .	119
Specimens in which Bac. Tbc. were not found. . . . .	418
Examinations for Diplococcus Gonorrhœa . . . . .	71
Examinations for Diplococcus Pneumoniæ. . . . .	16
Blood examinations for Hematozoon Malariae. . . . .	2
Plate cultures of water . . . . .	111
Widal agglutination tests. . . . .	4
Pathological examinations of meats (sections). . . . .	35
Samples of milk . . . . .	108
Animal inoculations . . . . .	37
Examinations for Meningococcus . . . . .	3
Bile cultures for Bac. Typhosus . . . . .	21
Disinfectants tested. . . . .	2
Examinations for Spirochæta Pallida. . . . .	8
Blood examinations for Bac. Tbc. . . . .	22
Feces. . . . .	2

### CHEMICAL EXAMINATIONS

Milk Analysis . . . . .	1735
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Samples of milk below standard.....	22
Samples of Cream.....	26
Samples of Water.....	33
Samples of milk for preservative.....	1757
Miscellaneous food analyses.....	47
Proprietary Medicines.....	6
Meat Preservatives.....	3
Milk Thickeners and Preservatives.....	4
Hair Dye.....	2
Ice Cream.....	8
Opium Assays.....	3
Alcohol Determinations.....	25
Condensed Milk.....	4
Oil.....	2
Coffee.....	2
Brandy.....	1
Candy.....	5
Vinegar.....	13
Miscellaneous.....	40
Determinations of carbon-dioxide in air.....	36
Number of times in court.....	13
Diphtheria sets prepared.....	1200
Culture media. C. C.....	40,000

During the past year 1735 samples of milk have been analysed in this laboratory, 22 of which were below legal standard which is as follows :

Total solids not below.....	12.5 per cent.
Butter fats not below.....	3.0 " "
Watery fluid not more than.....	87.5 " "
Specific gravity between.....	1.029 and 1.033 " "

All samples have been examined for the presence of preservatives and in no instance have they been found.

During the winter some trouble was experienced with an outbreak of ropy milk. This condition is due to an infection of the milk by the *Bacillus lactis viscosus*, a nonpathogenic organism. Changes do not occur until 24 hours after milking and frequently not until the milk reaches the consumer when it becomes stringy and ropes on pouring out of the bottle. The infection was traced

to one farm outside the city and a thorough disinfection of the stables and all utensils coming in contact with the milk removed the trouble.

Several private owners of cows have requested an examination of the milk from these animals for the presence of the tubercle bacillus, such examinations are very unsatisfactory the milk must be centrifugalized and the sediment injected into the peritoneal cavity of guinea pigs and six or seven weeks allowed to elapse to determine whether tuberculosis will develop or not; the most satisfactory method and the one recommended in these cases is to subject the suspected animal to the tuberculin test, which can be done by any veterinarian.

#### WATER

During the past year our water supply has experienced but little change. The small amount of ice coming down in the spring did not stir up the shallow water of Lake St. Clair and the water was muddy for only three or four days. At present the city water supply is in good condition, but with the increase in number and population of the cities and summer homes above us and the discharge of their sewage into the river and lake the danger of contamination is constantly increasing and only careful guarding of our water supply will keep up its standard.

The suspended organic matter in the water is low and this combined with the low total solids render it particularly suitable for manufacturing purposes, this is drawing manufacturing plants to our city which means an increase in population. The combination of a good potable water and one suitable for manufacturing purposes is not by any means as common as is supposed.

#### DETROIT RIVER WATER

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	Parts per million
Total solids .....	109.640
Volatile .....	38.540
Non-volatile .....	71.100

SiO <sub>2</sub> .....	7.500
Al <sub>2</sub> O <sub>3</sub> Fe <sub>2</sub> O <sub>3</sub> .....	11.100
Ca .....	23.800
Mg .....	5.400
K .....	.0576
Na .....	2.910
Cl .....	4.550
SO <sub>4</sub> .....	8.630
CO <sub>2</sub> .....	30.120

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Free Ammonia ....	.006
Albuminoid Ammonia ...	.060
Nitrogen as Nitrates .....	.180
Nitrites .....	none
Oxygen absorbed in 15 minutes .....	.440
Oxygen absorbed in 4 hours .....	.840

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Bacteria per C. C. average of 4 plates ..... 190

Animals inoculated -2- both recovered

#### DIPHThERIA

1514 cultures have been examined for diphtheria this year against 838 last year; of this number 419 or 27 per cent. contained the specific organism. A number of these cultures were made from suspicious nasal cases and the finding of the Klebs-Loeffler bacillus in many of them tends to prove that nasal diphtheria is frequently over looked and that such cases often act the part of carriers of infection disseminating disease.

Every year a certain number of cultures come in spoiled in the making. Complete directions for making a culture are placed on the outside of each culture set and there is no excuse for not following them. They are as follows:

#### DIRECTIONS FOR MAKING CULTURES IN SUSPECTED CASES OF DIPHThERIA

Fill out the blank which you will find in the box lid.

The patient should be placed in a good light, and, if a child, properly held.

Depress the tongue and rub the cotton swab gently, but freely against any visible exudate.

In cases where the exudate is confined to the larynx, avoiding the tongue, pass the swab far back, and rub it freely against the mucous membrane of the pharynx and tonsils. Without laying the swab down, withdraw the cotton plug from the culture tube, insert the swab and rub that portion of it which has touched the exudate over the surface of the blood serum. *Do not push the swab into the blood serum, or break the surface in any way.* Then replace the swab in its own tube, plug both tubes, place them in the box, and return the culture set immediately to the Health Department. The blank forms of report which accompany each outfit should be completely filled out and forwarded to the station with the tubes. The diagnosis will be ready by noon the following day, providing the tubes reach the Health Department by 4:45 P. M. The attending physician can obtain this immediately by telephoning to the Department after 12 o'clock noon. Cases proving to be diphtheria by bacteriological examination will be reported to the Bureau of Vital Statistics and subjected to the usual rules and regulations covering contagious diseases.

The most frequent cause of error is the churning up of the media with the swab completely spoiling the culture. The rubber caps which accompany each tube of media should be replaced after inoculating the media and plugging the tube thus preventing dessication of the culture during incubation.

#### TUBERCULOSIS

547 samples of sputum have been examined for the tubercle bacillus which was found in 119 or 21 per cent. of the specimens. Twenty-two specimens of blood were examined for this organism, these bloods were all from typical cases of tuberculosis and the etiologic factor was found in the sputum of each case, but in no instance could it be demonstrated in the blood. The object of these examinations was to try out Rosenbergers method and to see if the organism could be demonstrated in the blood before the

sputum. The method used was as follows:—about 5c. c. of blood is withdrawn and mixed with an equal quantity of a 2 per cent. solution of sodium citrate in physiologic salt solution this mixture is then centrifuged and the sediment smeared on a slide, dried and flooded with distilled water until laked, the film left on the glass is then dried and stained by Ziehl-Nielsens method.

During the past year most of the sputum specimens have come in in our own cases and the improvement is readily noted, there is still room for improvement however in the collection of the specimen, many of these are practically pure saliva a substance which very seldom contains the tubercle bacillus, if the directions printed on the reverse side of the blank, a copy of which is enclosed in every sample case, were carefully observed better results would follow.

#### DIRECTION FOR COLLECTING SPUTUM

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1. Remove the sputum bottle. Label it with the patient's name, address and the date and give it to the patient.
2. Direct the patient to spit directly into the bottle, without getting sputum on the outside.
3. The first sputum raised from the lungs in the morning is to be preferred. Saliva, vomitus and hæmorrhagic material should not be collected. Purulent and cheesy sputum most frequently contains the bacilli.
4. *Get directly from the patient or family the required information and fill out in full the blank on opposite side of this slip.*
5. When the patient return the sputum bottle, the physician should carefully examine the outside for sputum carelessly deposited upon it, and if any is found, wash it off with carbolic solution. He should test the stopper to insure that there is no leak; see that the opposite side of this blank is properly filled, repack both as they were when first opened and send to this laboratory.



Note. The demonstration of the presence of tubercle bacilli in the sputum shows the existence of tuberculosis, but the absence of tubercle bacilli, or failure to find them microscopically, does not exclude the existence of the disease. The disease can only be probably excluded if repeated examination of the sputum fails to show the presence of tubercle bacilli

Yours respectfully,

E. H. HAYWARD, M. D.

## REPORT OF MILK AND DAIRY INSPECTOR

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DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—I herewith have the honor to submit a report of work done by me as Milk and Dairy Inspector for the year ending June 30th, 1909.

Number of farms visited.....	260
Number of animals inspected.....	2805
Number of gallons of milk shipped from these farms daily .....	7328
Total number of visits to farms .....	1500
Total number of visits to receiving stations.....	150
Number of gallons of unsanitary milk dumped..	316
Number of unsanitary farms shut out .....	23
Of which reinstated .....	12
Number of licenses issued.....	10

In making this annual report to you, you will notice that my time has been spent principally on cleaning up one section of my territory, this being the eastern section which in my estimation needed inspection mostly. I found that after the first visit I would have to call again to see that the instructions I gave on the first visit were carried out. I even found that a third, fourth and fifth visit was necessary to enforce the rules and regulations of the Board of Health. When first visiting most of these farms the farmers were very arbitrary to our inspection privileges. This has in a great measure been overcome. About the latter part of September last year numerous cases of typhoid fever were reported to this office. Upon thorough investigation we found that the families infected, in nearly all cases, has received milk coming from the Connor's Creek section. I also found eight cases of typhoid fever

on the dairy farms located on this Creek. This infection I believe to have been caused by the stagnant and contaminated water of Connor's Creek. This was being used as drinking water for both for human purposes and cattle as well as for washing of utensils used for dairy purposes. I immediately shut out all dairy farms from this section until they were thoroughly disinfected and put in sanitary condition. I also saw to it that they provided themselves with new receptacles and caused them to obtain their water from city. I also forbid the pasturing of cattle in or about this Creek. From this time on it was noticeable that no new cases of typhoid were discovered and the previous cases above referred to, soon recovered with the exception of about ten deaths which occurred in this section during the months of September and October. About two months of my time was entirely spent on this investigation,

During the year I have caused eight new stables to be built. And with the exception of a few stables visited all had to make repairs with respect to ventilation, sanitation, tying of cattle, etc.

I found that a great many farmers did not cool their milk properly. This I think will be remedied by the enforced usage of a cooler and aerator which if handled properly will cool and aerate the milk immediately after milking, which is absolutely essential to the preserving of pure and wholesome milk. I also found that very few farms were equipped with the necessary dairy houses in which to store their milk, which were separate from the stables or dwelling houses. This defect has been remedied in most all cases.

There are just a few recommendations that I would care to make at this time principally the enactment of legislation or an ordinance to enforce the licensing of dairy farms from which milk is received into the city. This, I think, would greatly lessen our work. The score card system now in use could be remedied considerable to make it less complicated and would eliminate a great part of our clerical work.

Respectfully submitted,

JOHN F. ROEHL,  
*Milk and Dairy Inspector.*

## REPORT OF MILK INSPECTORS

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DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer.*

DEAR SIR:—The following is the report of the Milk Inspectors for the year ending June 30th, 1909.

Number of samples taken.....	1474
Number of samples below standard. ....	18
Number of cans dumped.....	10
Formaldehyde.....	0
Prosecutions for adulteration.....	2
Convictions .....	1
Inspections of dairy premises.....	1438
Orders for licenses issued.....	1026
Orders for licenses refused .....	59
Complaints received from citizens (about) .....	50
Dealers forced out of business .....	48
Dealers premises improved .....	50

By computing the percentage of all samples below the chemical standard it will be found that approximately  $1\frac{1}{4}$  per cent. were adulterated as compared  $3\frac{1}{3}$  per cent. one year ago. By deducting 10 adulterated samples which were taken from cans afterward condemned and destroyed and never reached consumers, a percentage of  $\frac{1}{2}$  per cent. is left as compared with  $1\frac{2}{3}$  per cent. for last year. This cannot be regarded as anything but a very favorable state of affairs so far as chemical purity is concerned and as the city or inside Inspectors had very little hope of reducing the low percentages obtained last year, they believe that much credit for this year's further reduction belongs to those Inspectors working with the producers outside the city.

The milk sold in stores has under the regulation forbidding the sale of loose or bulk milk come to present the same proportion of adulteration as the above and these low percentage now replace the ones of 20 per cent. or 25 per cent. in previous years. In addition to this improvement which can be positively shown by figures resulting from chemical analysis, no more loose milk is found in uncovered receptacles standing around the floors or in ice boxes used for general purposes, exposed to dust, dirt and the emanations of other articles which may happen to be in its vicinity. It is impossible to show in figures the improvement which this results in but it will not be disputed nor underestimated by anyone who is posted as to what constitutes the most important qualities of pure and wholesome milk. All milk now sold in stores in Detroit is kept in bottles filled by the wagon milk dealers at a place and under such conditions as are approved by this department.

The inspection and supervision of wagon dealers or regular dairymen has continued as formerly. Those who have been located at the same place for any length of time have places suitable for the handling of milk in a proper manner and but little attention need be directed towards them, particularly those who have been in business for a number of years. They are willing and anxious to do anything necessary to improve their equipment and it is gratifying to note the prosperity and business success of these advanced dairymen. New dealers are constantly coming into the business however, and these practically all look on milk handling as a buying and selling proposition pure and simple. They do not appreciate the care and painstaking effort necessary to the successful conduction of the dairy business. They are usually shop or store workers who go into dairying for the reason that they believe it would be healthier to work out of doors. With these it is necessary to go into the details of modern dairying from the ground up and repeat them again and again. For it is not enough to hand a copy of the statute, ordinance and rules on pure food to a new dairyman and tell him that he will be required to live up to them, just as it would be insufficient to tell a freshman student



assisting at his first operation that he would be required to be aseptic. The principles back of these regulations must be presented repeatedly to him for if their spirit as well as letter is not made a part of him he will require an inspector to watch his every move as long as he stays in the milk business. The reason for this is that even with an earnest desire to do what is right a different standard of cleanliness prevails among different people and many would sincerely class as clean premises which would not be so considered by this department. As an instance of this the case may be stated of a westside dealer. At first he kept his milk, washed, dried and filled his bottles in the horse stable. Under pressure of this department he erected a milk house adjoining the barn but knocked a door through into the barn. Again this department interfered and the door was closed. Next he was found washing the bottles in the barn but readily consented to transfer this operation to the milk house. Finally during a rush season he moved his bottle drying rack into the barn to give him more room in the milk house and thereby neutralized all his former efforts. Of the new entrants into the dairy business it is safe to say that not more than one in ten stay in it more than a year. Then under pressure from this department or other cause they sell out to another new comer and the instructions, threats and complaints begin all over again.

The small producers having from one to six cows inside the city limits present very little permanent improvement in sanitary conditions. They are very difficult to regulate on account of their lack of intelligence and interest in the milk business. They require an amount of the Inspectors time out of all proportion to the quantity of milk produced which fortunately is very small. The same conditions prevail in other cities.

It is very agreeable to report that the milk temperature problem seems pretty well solved so far as the city delivery is concerned. The use of formaldehyde has entirely disappeared not a single sample having been found to contain it during the past year. With its disappearance the milk men have so universally adopted so affective an iceing system that practically all tests made on

retail delivery wagons show a temperature of 50 degrees F. This is as milk is delivered to consumers houses. If delivered between 2 and 5 a. m., and from that time allowed to stand on the steps until 7 or 8 a. m. we have no way of knowing what its temperature may be but this custom undoubtedly constitutes a very weak link in the endeavor to secure to consumers a satisfactory milk supply and is the source of much dissatisfaction arising from early souring. The temperature tests made at the receiving stations do not show as good a condition as the above though there is a decided improvement in that no milk is now found which has been shipped with absolutely no cooling whatever. The large creameries all maintain icing plants at their country receiving stations and their milk comes into the city at a temperature varying from 40 to 46 degrees. The farmers who ship individually to individual milk peddlers are practically never provided with ice houses. They are, however, uniformly installing aeraters and cooling the milk to the lowest limit possible with spring water. With this system their milk comes into the city at a temperature of about 60 degrees. We never find milk at these stations showing a temperature of 80 degrees as we did up to one year ago.

One of the most unsatisfactory things connected with milk inspections is the difficulty of showing in figures the good results accomplished. It is largely designed to be a work of preventive medicine rather than of cure and it is safe to say that the more effective it is the less spectacular will it be. During the last year, however, an epidemic of typhoid fever gave an opportunity to test its practical effectiveness. Four cases of typhoid having been reported on one dealers route a house to house canvas of his customers was made and disclosed a total of twenty-four cases in one small district. This would usually be considered a large number for the whole city. The source of infection was quickly traced to a contaminated region bordering Connor's Creek. The product of milk from this section was excluded from the city, it being necessary to resort to dumping large quantities in some instances before the quarantine could be made effective. Three or

four cases of typhoid already in the incubation state when this action was taken were reported thereafter but no new cases were infected from the milk supply after that time.

Last fall the hoof and mouth disease broke out in several dairy herds in the neighborhood of Detroit. There is very little to report concerning the city milk end of this epidemic. The milk supply of that whole neighborhood was excluded from the city ten days before the federal officers arrived and made a diagnosis of the true condition. No untoward effects in humans were reported in this section as a result of this outbreak and we believe with one possible exception there were none anywhere in the country.

On account of the scarcity of skimmed and watered samples and the total absence of formaldehyde the prosecutions for the past year amounted to only two. of these one was convicted and fined \$5.00 and costs, the other was dismissed as it was impossible for us to prove the ownership of the milk route.

During the past year 312 gallons of milk have been destroyed by dumping. This has resulted from extreme cases when the owner has defied the orders of this department to keep his product out of the city or where adulterated milk has been found in the possession of dealers and analyzed before they had an opportunity to deliver it.

The different branches of this work of milk inspection have grown to varied and numerous that it has become impossible to do the work that has accumulated as we would like to do it and with the promptness that it should be done with the same force so far as the city itself is concerned that was employed eight years ago, and at the same time undertake any of the innovations which should be a part of the milk inspection of a large city. There are in the city eighteen hundred places retailing milk. To take enough samples from all of these so that the Inspectors would be at all times conversant with the quality of milk each dealer is selling and to follow up the reports received from the Chemist, doing immediately whatever is necessary when adulterations are found or when the tests show conditions approaching too close to the minimum

standard and at the sametime testing in like manner the supply at the stations to protect the city dealers would be a work to take practically all the time of two men. To maintain a system of inspection over the premises of the dealers and especially the new ones so that a fault in the premises or management would be corrected as soon as or before it occurred, would also require the services of at least two men. The clerical work of this branch of your department such as the keeping of a card filing system, recording the condition of dairies and noting the changes ordered to be made and the agreements of the dealers thereto, the receiving and passing upon applications for licenses and the issuing and recording of the same together with the keeping of a book recording the results of analysis under each dealer's name, to be done promptly and in a businesslike manner would require the time of a clerk doing nothing else. It has been a source of regret and irritation that this clerical work has not been more complete and up to date and adequate to the needs of the large department, for often this bookkeeping has been delayed by outside work that would admit of no delay until the records were so old as to be of little practical value. All of the above makes no mention of the detail work such as the investigation of complaints, correspondence needing the personal attention of the Inspectors, etc. Almost every mail brings inquiries for detailed information from other municipalities who have generally been very glad to reciprocate to our inquiries from them.

The chief trouble, however, is that with the present force there is no possibility of taking on more work and there are a number of new things which should be taken up by the milk department. The restaurants have never received any systematic inspection. There is no question but that more time should be devoted to them. A system of cards to be filled out by the farmer and countersigned by the local Health Officer on the outbreak of contagious diseases in his family and mailed to this office would prevent such an epidemic of typhoid as occurred last fall. It would obviate the necessity of looking for the cause after twenty-four persons had been affected, some of whom unfortunately died. There seems to

be in this city no less number of different brands of "Certified Milk" than the number of milk pedlers having three or more wagons. Each concern "Certifies" its own product, whatever that may mean. A milk of known quantitative chemical constituents and the lowest bacterial count together with the other qualifications generally covered by the term "Certified Milk" is a necessity of the present time, but it should be certified by the Board of Health. The name should not be used in its present meaningless way. This department has always declined to issue letters to any dealer commending his milk supply for the reason that dealers would be apt to use such letters in a way that would be unfair to other dealers. We believe, however, that the public would be interested in knowing the holders of medals for superiority in the production, handling and delivery of milk, the medals to be won in impartial competition. If these competition could be held frequently enough we believe that the public would be of material assistance in eliminating the indifferent dealers.

Respectfully yours,

WM. H. PRICE, M. D.

GEO. H. PALMERLEE, M. D.



## REPORT OF MILK AND DAIRY INSPECTOR

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DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer:*

DEAR SIR:—I herewith present you my first annual report as Milk and Dairy Inspector, being for the fiscal year ended June 30, 1909.

Farms visited.....	408
Cows inspected .....	4412
Cows affected with actinomycosis.....	13
Cows affected with foot and mouth disease ..	44
Cows affected with tuberculosis according to tuberculin test.. ..	14
Affected with tuberculosis according to physical examination.....	57
Daily average milk production of these farms ..	9197 gallons

I must say that I have been agreeably surprised at the general condition of the cows, but am sorry to say that I cannot speak so favorably of the stables and the sanitary conditions of their surroundings. I find that most of the dairymen overlook some very important matters, namely, ventilation, drainage and light, and I have been endeavoring to impress this matter on their minds and I find that they are coming to the conclusion that they should bring about better conditions as suggested. With regard to the cooling of the milk I have been endeavoring to enforce the use of the aerator and I find that those that are using them are very much pleased with them and I am also urging the use of stanchions for fastening or tying the cows in the stables, instead of using the chain or rope, as I find it impossible to keep the cows clean otherwise. I have

had difficulty with some of the dairymen when I have advised them to clean up and put their premises in a proper sanitary condition and they have questioned my authority to come on their premises. One farmer would not allow me to examine his cows or stables and I at once prohibited him from shipping milk into the city and kept his milk out for six months before he agreed to the inspection. Another farmer would not put his stables in proper condition and I kept his milk out for a period of eight months, when he agreed to build a new stable. I have compelled a number of farmers to build new stables and also repair their stables. I have been compelled to stop the shipment of milk from several farmers until they cleaned up and put their stables in a proper sanitary condition, and as soon as they find they have to do those things they readily comply with my requests. In the month of October last I was informed that there was a farmer in Oakland county shipping milk into the city from a herd of fourteen cows that had been tested by the use of tuberculin and proved to be affected. I at once made an investigation and found that the report was correct and immediately prohibited the shipment of milk into the city from that farm. The herd was placed under quarantine by the State Live Stock Sanitary Commissioner, and are still under said quarantine. On the 18th day of October, 1908, there was a complaint made to you that milk was being shipped into the city from the vicinity of Elm station, Wayne County, from a number of cows that were sick, and you requested me to make an investigation of that report. On Friday the 19th, I therefore proceeded to that district and found that the complaint was well founded. I found four herds aggregating forty-four cows, all showing symptoms of apthious fever, or what is more commonly known as foot and mouth disease. A number of said cows had been treated for about three weeks. I at once notified the owners of the above mentioned herds to stop shipping milk into the city and the entire shipment of about one hundred and fifty cans a day from Elm station was prohibited. The matter was reported to you immediately and also to Dr. Green

of the U. S. Bureau of Animal Industry, as well as to the State Live Stock Sanitary Commission.

Now with regard to tuberculosis, as you no doubt are well aware, it is an impossibility to properly diagnose a case of tuberculosis in the bovine by a physical examination, hence the small number of cases reported (57), and I feel satisfied that the tuberculin test would increase that number to a very great extent and I would therefore recommend that the tuberculin test be insisted on as far as possible. Of course it will entail a hardship on a great many dairymen as the state law stands at present. I have had a few dairymen test out their herds and I think that within the next year we will see a large increase in the number of herds so tested.

Respectfully submitted,

JOSEPH HAWKINS, V. S.,

*Milk and Dairy Inspector.*



## REPORT OF MEAT INSPECTORS

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DETROIT, MICHIGAN, July 1, 1909.

*Guy L. Kiefer, M. D., Health Officer :*

DEAR SIR:—The following is the report of the work done by the Meat Inspectors during the year ended June 30, 1909.

### INSPECTIONS OF MEAT OFFERED FOR SALE :

Eastern Market and other markets :—Carcasses of beef, 31,788; dressed sheep, 63,297; dressed calves, 26,248; dressed hogs, 12,689; dressed poultry, 498,300 lbs.; fish, 438,800 lbs. Chicago Beef Houses:—Carcasses of beef, 23,880; dressed sheep, 19,965; dressed calves, 8,295; dressed hogs, 4,621. Various slaughter houses:—Carcasses of beef, 17,200; dressed sheep, 15,315; dressed calves, 11,955.

### INSPECTIONS OF LIVE STOCK :

Eastern Market:—5,679 crates of live poultry.

### INSPECTIONS OF MARKETS, SLAUGHTER HOUSES, AND COMMISSION HOUSES :

Made 2,660 calls at retail markets ; 857 calls at slaughter houses, fish houses, Chicago beef houses, commission houses, and the Western market were visited on an average of twice a week.

### CONDEMNED MEATS

#### RETAIL MARKETS

Spoiled and unwholesome meats, 16,671 lbs.



## WHOLESALE AND RETAIL MARKETS

611 Dressed sheep—16,016 lbs.  
230 Dressed calves—13,331 lbs.  
11 Dressed hogs—1,875 lbs.  
Smothered poultry—4,295 lbs.  
Dressed poultry—6,090 lbs.  
Fish—25,095 lbs.  
Beef—20,889 lbs., consisting of carcasses, quarters, sides, rounds, etc.  
Veal—1,140 lbs., consisting of fronts, quarters, etc.  
Hams—147 lbs., consisting of boiled and smoked hams.  
Pork ribs—2,700 lbs.  
Pork loins—105 lbs.  
3 Barrels of livers.  
8 Boxes of sardines.  
3 Boxes of kidneys—210 lbs.  
2 Boxes dried beef—30 lbs.  
Head cheese—120 lbs.  
10 Boxes brains.  
2 Crates of eggs.  
1 Box evaporated apples.  
4 Bunches bananas.  
77 Pairs rabbits.  
12 Boxes herring.  
Pigs heads—470 lbs.

INSPECTIONS OF LIVE STOCK AT THE MICHIGAN  
CENTRAL RAILROAD STOCK YARDS:

Cattle 53,603; Calves 40,254; Sheep 215,743; Hogs 335,005; condemned and destroyed at these yards. Live stock:—Cattle 64, after slaughtering, and on second inspection, 11 of these were passed.

Sheep 662; Calves 310; Hogs 6.

Since our last report, the owners of six slaughter houses situated in the district, west of Woodward avenue have installed con-

crete or brick floors in the buildings and yards connected with them, and others are at present making all the alterations and improvements in their premises required by law..

During the ensuing year the majority of the owners of the slaughter houses in that district will have made the necessary improvements to place them in sanitary condition.

The orders issued by the Board of Health to the Michigan Central Railroad Company to properly drain and pave its stock yards, are being carried out, some of the work having already been completed, the sanitary conditions at present in these yards being much better than they were at the last report.

Respectfully submitted,

JACOB L. WALTZ,

FRANK KOLB,

*Meat Inspectors.*







UNIVERSITY OF ILLINOIS-URBANA



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